

19 of the 1987 specification includes a receiver station that coordinates and outputs a multimedia presentation presented in connection with the "Wall Street Week" television program ("WSW"). The multimedia presentation includes the traditional television program output and a computer generated graphic image depicting the performance of the viewer's stock portfolio. A similar embodiment is described in the 1981 specification in column 19 and the top of column 20. The 1981 specification discloses the coordination and output of a multimedia presentation in the description of the microcomputer generated graphic of the viewer's stocks' performance being transmitted to the TV set to be overlaid and displayed with the studio generated graphic. *See* 1981 Spec., Col. 19, ll. 60-67.

As a general matter, the concept of identifying program content, determining whether the program content is of interest to a subscriber, and the automatic tuning to programming that is of interest to a subscriber is disclosed in 1987 specification's description of the capacities of signal processor, 26. *See* 1987 Spec., P. 28, ll. 18-25. Later sections of the 1987 specification extend and develop this concept within the context of the earlier disclosure regarding the multimedia presentation presented in connection with the WSW program. These sections include the disclosure of identifying or determining content of a medium or signal. In particular, the section beginning at page 427 (which is an extension of the WSW example introduced on page 288) discloses, *inter alia*, selective processing of incoming programming. The 1987 specification discloses the comparison of specific WSW information that is preprogrammed on the microcomputer and reflects the wish of the subscriber to view (or record) WSW and the specific WSW information that is contained in messages in the cablecast which are received at the receiver station. *See* 1987 Spec., P. 435-437; specifically, P. 436, ll. 26-35. Determining a match in the comparison of the program unit-of-interest information

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U.S.C. § 120. Citations to the 1981 specification are to U.S. Patent No. 4,694,490, which issued on application serial number 06/317,510.

causes the receiver station to input information that indicates that the WSW program is on a particular channel at a particular time. *See* 1987 Spec., 437, ll. 1-3. In other words, the receiver station determines that the content of the particular channel at the particular time is the WSW program. *See* 1987 Spec., P. 430, ll. 19-26. The 1981 specification also discloses a receiver station determining that WSW is being televised by analyzing the program and channel identifiers on all programming being cablecast. *See* 1981 Spec., Col. 19, ll. 12-23. In both the 1981 and the 1987 disclosures, the receiver station identifies or determines the content (the WSW program) of a medium or signal (the particular channel that carries the WSW program). In the examples, the receiver station is programmed to televise and/or record the WSW program when it is available and broadcast. *See* 1987 Spec., P. 428, ll. 21-26; 1981 Spec., Col. 19, ll. 5-8, ll. 20-29. After the receiver station identifies when the WSW program is broadcast and tunes to the broadcast, the multimedia presentation can be presented in connection with the WSW program. Accordingly, the output and coordination of the graphic of the user's stock performance overlaid on the studio generated graphic (i.e., the recited multimedia presentation cited above) is based on determining or identifying when and where the WSW program (i.e., the recited content) is broadcast.

The above disclosure is but one example of the description of a multimedia presentation that is outputted or coordinated based on identifying or determining content of at least one medium or signal. There are other descriptions of this concept in the specification. For example, beginning at page 469 of the 1987 specification, further aspects of the control of a receiver station are set forth in the context of a television program on cooking techniques (the "Cooking Show example"). The television program queries the viewer whether the viewer wants a printed copy of the recipe discussed in the program. *See* 1987 Spec., P. 471. Based on an affirmative viewer response, 1987 Spec., P. 471, the recipe is printed at the receiver station, 1987 Spec., P. 475. Thus, the Cooking Show example discloses a multimedia presentation which consists of the television

programming on cooking techniques and the printed recipe. The 1987 specification further discloses that the information of the recipe may be embedded in a transmission that is different from the transmission of the programming of the cooking techniques. *See* 1987 Spec., P. 476-77. The 1981 specification also discloses the Cooking Show example with the same features. *See* 1981 Spec., Col. 20, ll. 11-69.

During the cooking program, an instruction is received that indicates that the receiver station should check for particular user input (the first SPAM message on page 471 of the 1987 specification). This instruction includes the identity of the correct user response. As the correct user response matches a prompt included as content of the cooking program ("TV567#" appears on the screen of the users television, 1987 Spec., P. 471, ll. 12-13), when the receiver station processes this response it identifies content of the cooking program. *See* 1987 Spec., P. 472, ll. 13-17; P. 471, ll. 14-25. Based on this identification the recipe may be printed in accordance with the television program on cooking, if the user has responded with the identified response. Accordingly the multimedia presentation is coordinated based on identifying content of the television signal or medium. The 1981 specification discloses a similar instruction that identifies a prompted user response. The instruction is the signal identified on the incoming programming. *See* 1981 Spec., Col. 20, l. 20-33.

The above discussion provides an overview of some of the basic elements of the invention defined by the claims of the instant application. In the following section, applicants address each proposed amended claim by presenting a summary of the claim followed by a summary of the written description support for major limitations present in each claim. In addition to the support identified in the following section, applicants have provided detailed support from both specifications for each and every limitation of the pending amended claims in the support charts attached as Appendix C of this Response.

**B. Summary of and Specification Support for the Amended Claims**

**1. Independent Claim 2**

Applicants propose to amend claim 2 to set forth a method of outputting a multimedia presentation at a receiver station. The multimedia presentation is based on a plurality of signals including at least two media. A first portion of the multimedia presentation is provided by storing a first medium. Presentation of the first portion of the multimedia presentation with a presentation of a second medium is coordinated at a receiver station under computer control. The coordination of the presentation is based on determining content of the second medium. Based on the coordination, the multimedia presentation is output such that content of the first portion of the multimedia presentation has a predetermined relationship to content of the second medium. Initially, the plurality of signals including the two media are received at a receiver station. At least a portion of the plurality of signals is received from a source external to the receiver station.

Written description support for amended claim 2 is found in at least the Wall Street Week (WSW) example disclosed in both specifications. Support for the step in claim 2 of outputting at a receiver station a multimedia presentation has been already been identified in Section II.A above.

In addition to the step of outputting at a receive receiver station a multimedia presentation, there are several novel features of claim 2, including the step of "storing a first medium included in said at least a portion of said plurality of signals to provide a first portion of said multimedia presentation." Support for this storing step exists at least in both specification's disclosure of the microcomputer's (at a receiver station) receipt of stock price data (signals) each day that is stored on the microcomputer. *See* 1987 Spec., P. 449, lines 3-35; 1981 Spec., Col. 19, lines 35-41.

Another novel feature of claim 2 is the step of coordinating at the receiver station a first portion of a multimedia presentation with a second medium of a multimedia

presentation based on the step of determining content of a second medium received in a plurality of signals. The step of determining content of a second medium received in a plurality of signals is supported in the 1987 specification by at least the disclosure of the microcomputer determining a match between specific WSW (program-unit-of-interest) information preprogrammed on the microcomputer and the program unit-of-interest information that is contained in messages in the cablecast (i.e., the recited plurality of signals) which are received at the receiver station. *See 1987 Spec., P. 436, l. 9 - P. 437, l. 3.* The program unit-of-interest information relates to the content of the WSW program and corresponds to the recited second medium. The "determining content" step is similarly supported in the 1981 specification by at least the disclosure of the microcomputer analyzing all of the program and channel identifier signals in a predetermined fashion and determining that WSW is being televised on a certain channel. *See 1981 Spec., Col. 19, ll. 12-23.* Based on the "determining content" step, a first portion of a multimedia presentation is coordinated at the receiver station with a second medium of a multimedia presentation. This "coordination step" is supported in the 1987 specification by at least the disclosure of the signal processing apparatus of Figure 7C and methods of selecting receivable information and programming and the control of combined medium, multi-channel presentations. *See 1987 Spec., P. 40, l. 31 - P. 41, l. 3; P. 18, ll. 24-27.* The "coordination step" is similarly supported in the 1981 specification by at least the disclosure of programming being delivered at different times to one place and being coordinated to give a multimedia presentation. *See 1981 Spec., Col. 19, lines 31-34.* The limitation that the coordination of the multimedia presentation is based on the "determining content" step is supported in the 1987 specification, for example, in the disclosure that the microcomputer "determines a match" thus enabling microcomputer to receive signals embedded in the WSW programming and coordinate the disclosed multimedia presentation. *See 1987 Spec., P. 436, l. 9 - P. 437, l. 3; P. 439, ll. 14-15; P. 21, ll. 20-24.* Similarly, the 1981 specification discloses that after microcomputer

determines that WSW is being televised on a certain channel the microcomputer coordinates the disclosed multimedia presentation. *See* 1981 Spec., Col. 19, ll. 20-25; Col. 19, ll. 42-44.

Finally, the step of outputting the multimedia presentation based on the step of coordinating such that content of said first portion has a predetermined relationship to content of said second medium is supported by at least both specification's disclosure of the display of a microcomputer generated graphic of a user's own stocks' performance overlaid on the studio generated graphic. *See* 1987 Spec., P. 26, lines 4-11; 1981 Spec., Col. 19, line 64 - Col. 20, line 2. In these disclosures, the display of the microcomputer generated graphic (the first portion of the multimedia presentation) is overlaid on the studio generated graphic (the second medium of the multimedia presentation). Further, that the microcomputer generated graphic is generated to contain the viewer's stock portfolio performance provides support for recitation of coordinating a multimedia presentation such that content of said first portion has a predetermined relationship to the market performance content of said second medium. *See* 1987 Spec., P. 25, ll. 33-34; P. 26, ll. 8-11; P. 25, ll. 28-31; and 1981 Spec., Col. 19, ll. 59-60; Col. 19, l. 67 - Col. 20, l. 2; Col. 19, ll. 53-59.

**a. Dependent Claim 3**

Applicants propose to amend claim 3 to set forth that the first medium is stored in the computer. In the 1987 specification, it is disclosed that a microcomputer records the relevant closing stock price data that are received. *See* 1987 Spec., P. 449 lines 13-35. The 1981 specification includes a similar disclosure that a microcomputer records applicable closing stock prices that are received. *See* 1981 Spec., Col. 19 lines 35-41.

**b. Dependent Claim 4**

Applicants propose to amend claim 4 to depend from claim 3 and to set forth that the computer performs the step of determining as recited in claim 2. Both disclosures

provide multiple descriptions of a computer determining program content. For example, in the 1987 specification it is disclosed that a computer determines that an identification code matches particular schedule information. *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 3; P. 439, ll. 14-15; P. 21, ll. 20-24. The 1981 specification includes a similar disclosure that a computer determines what incoming programming should be processed. *See* 1981 Spec., Col. 19, ll. 20-25; Col. 19, ll. 42-44.

**c. Dependent Claim 5**

Applicants propose to amend claim 5 to depend directly from claim 2 and to set forth that each of the plurality of signals is received from an external transmitter station. The plurality of signals that are received in this method of outputting a multimedia presentation include the signal on which the WSW program is transmitted and the signals on which the stock price data that is used to create the graphic overlay are transmitted. These signals are described as being received at a receiver station from an external transmitter station. In the 1987 specification, a network is disclosed in which the receiver stations receive television programming transmissions (including WSW) from an intermediate transmission station (e.g., a cable system headend facility). *See* 1987 Spec., P. 420, ll. 21-19. The stock price data is also transmitted over the cable system by this remote transmission station. *See* 1987 Spec., P. 449, ll. 13-26. The 1981 specification also discloses an intermediate transmission station or cable "headend" facility that transmits programming to receiver stations. *See* 1981 Spec., Col. 10, ll. 24-28. The stock price is received from the cable headend through a digital information channel. *See* 1981 Spec., Col. 19, ll. 35-37.

**d. Dependent Claim 6**

Applicants propose to amend claim 6 to depend from claim 5. Claim 6 as proposed sets forth that the external transmitter station is an intermediate station and further sets forth that the claimed method includes the step of programming the receiver

station to process signals originated by the external transmitter station. The external transmitter station is illustratively disclosed as an intermediate transmission that is a cable system "headend." *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 3; P. 439, ll. 14-15; and 1981 Spec., Col. 19, ll. 17-23. The step of programming the receiver station to process signals originated by the external transmitter station is supported in the disclosure of microcomputer being preprogrammed to respond to instruction signals embedded in the WSW program. *See* 1987 Spec., P. 21, ll. 20-24; and 1981 Spec., Col. 19, ll. 42-43.

**e. Dependent Claim 7**

Applicants propose to amend claim 7 to depend directly from claim 2 and to set forth that content of the second medium explains a significance of content of the first portion of the multimedia presentation. The disclosed WSW television programming is a second medium. The graphic overlay of a viewer's stock portfolio performance is a first portion of the multimedia presentation. Content of the WSW television programming, i.e. the host saying "and here is what your portfolio did," explains the significance of the content of the graphic overlay. *See* 1987 Spec., P. 25, ll. 33-34; and 1981 Spec., Col. 19, ll. 59-60.

**f. Dependent Claim 8**

Applicants propose to amend claim 8 to depend from claim 7. Claim 8 as proposed sets forth that the content of the second medium explains the significance in audio. Also, proposed claim 8 sets forth the additional step of causing a first selective transfer device to communicate the audio to an audio output device. The host saying "and here is what your portfolio did" is an explanation of significance and is in audio. *See* 1987 Spec., P. 25, ll. 33-34; and 1981 Spec., Col. 19, ll. 59-60. The tuner of the receiver station is a selective transfer device that communicates the audio of the WSW programming to the television speaker. *See* 1987 Spec., P. 289, ll. 12-15, 19-20; P. 295, ll. 17-25; P. 310, ll. 3-5; and 1981 Spec., Col. 19 ll. 27-29.

**g. Dependent Claim 9**

Applicants propose to amend claim 9 to set forth that the second medium comprises further information for output at the receiver station in addition to the audio and that the receiver station includes a plurality of selective transfer devices. The method further comprises the step of causing a second of the plurality of selective transfer devices to communicate the further information for output to an additional output device separate from said audio output device. The WSW programming disclosed in the specifications is a second medium and includes audio spoken by the host and other video information such as the studio generated graphic of the performance of the Dow Jones Industrials. *See* 1987 Spec., P. 25, ll. 26-33; and 1981 Spec., Col. 19, ll. 53-56. The multiple tuners disclosed show a plurality of selective transfer devices. *See* 1987 Spec., P. 295, ll. 6-8, ll. 17-24; P. 310, ll. 8-24; and 1981 Spec., Col. 19; ll. 24-25, ll. 27-29. Furthermore, the audio is output at a speaker and the video is output at the screen of a monitor. *See* 1987 Spec., P. 25, ll. 23-33; and 1981 Spec., Col. 19, ll. 53-56.

**h. Dependent Claim 10**

Applicants propose to amend claim 10 to set forth that the second medium comprises television, the further information for output includes video, and the additional output device includes a video monitor. The WSW programming is television. Further information for output in the WSW programming includes the studio generated graphic, which is video. *See* 1987 Spec P. 25, ll. 23-33, 1981 Spec., Col. 19, ll. 53-56. The video is output at the video monitor of a TV set.

**i. Dependent Claim 11**

Applicants propose to amend claim 11 to depend directly from claim 2 and to set forth that the plurality of signals includes a digital data channel. The signals including the stock price data show some of the signals that make up a plurality of signals. The 1987 specification discloses that such information may be received over a digital data channel.

*See* 1987 Spec., P. 422, ll. 10-13, and "one digital data channel" in Fig. 7C. The 1981 specification also discloses that the stock price data is received by means of a digital channel. *See* 1981 Spec., Col. 19, ll. 35-41, and "one digital data ch." in Fig. 6C.

**j. Dependent Claim 12**

Applicants propose to amend claim 12 to depend from claim 11 and to set forth that the receiver station receives the first medium in the digital data channel. The signals including the stock price data show a first medium. These signals are disclosed as being received in a digital data channel. *See* 1987 Spec., P. 422, ll. 10-13, and 1981 Spec., Col. 19, ll. 35-41.

**k. Dependent Claim 13**

Applicants proposed to amend claim 13 to set forth that the step of determining comprises processing an identifier. The microcomputer determining a match between specific WSW (program-unit-of-interest) information preprogrammed on microcomputer and the programming content of the WSW program information transmission shows determining content of the second medium in the 1987 specification. *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 3. This determining step includes processing the specific WSW (program-unit-of-interest) information that identifies the WSW program. In the 1981 specification the microcomputer analyzes identifier signals in a predetermined fashion to determine that WSW is being televised on a certain channel. *See* 1981 Spec., Col. 19, ll. 17-23.

**l. Dependent Claim 14**

Applicants propose to amend claim 14 to set forth that the identifier identifies the content of the second medium. The specific WSW (program-unit-of-interest) information in the 1987 specification shows an identifier. *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 3. This information identifies the content of the programming as the WSW program. The identifiers recited in the 1981 specification identify the content of the

programming on a particular channel as the WSW program. *See* 1981 Spec., Col. 19, ll. 20-23.

**m. Dependent Claim 15**

Applicants propose to amend claim 15 to set forth that the content of the second medium includes audio. The WSW programming provides support for a second medium. The WSW programming includes audio (e.g. the host says “and here in what your portfolio did”). *See* 1987 Spec., P. 25, ll. 33-34, and 1981 Spec., Col. 19, ll. 59-60.

**n. Dependent Claim 16**

Applicants propose to amend claim 16 to set forth that the content of the second medium includes video. The WSW programming provides support for a second medium. The WSW programming includes video (e.g. the studio generated graphic). *See* 1987 Spec., P. 25, ll. 23-33, and 1981 Spec., Col. 19, ll. 53-56.

**o. Dependent Claim 17**

Applicants propose to amend claim 17 to set forth the additional step of storing the second medium at the receiver station. The WSW programming provides support for a second medium. The recording of the WSW program shows storing a second medium. *See* 1987 Spec., P. 446, ll. 18-23, P. 436, l. 9 - P. 437, l. 6; and 1981 Spec., Col. 19, ll. 25-27.

**p. Dependent Claim 18**

Applicants propose to amend claim 18 to set forth that second medium is stored based on the step of determining. The recording of the WSW programming provides support for storing a second medium. The recording of the WSW programming is controlled by instructions within the WSW programming that are received based on determining that the WSW program is broadcast and tuning to the proper channel. *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 6; and 1981 Spec., Col. 19, ll. 20-27. Accordingly, the

recording of the WSW program is based on determining the content of the WSW program.

## 2. Independent Claim 20

Applicants propose to amend claim 20 to set forth a method of outputting a multimedia presentation at a receiver station. The method uses a processor instruction and an identifier which is received separately from the processor instruction. The receiver station is controlled to respond to the processor instruction to coordinate the presentation of a first medium and a second medium based on identifying the content of the second medium. The control is also based on identifying content of the first medium. The identifier is included in a first of a plurality of signals received from a source external to the receiver station. A first signal of the plurality of signals is processed to provide the first medium and the identifier. The identification of the content of the first medium is based on the identifier.

Written description support for proposed claim 20 is found in at least the "Wall Street Week" examples. Support for the step in claim 20 of outputting at a receiver station a multimedia presentation has already been identified above in Section II.A of this Response. Additionally, the step of identifying content of a first media has been supplied above in Section II.A.

In addition to these two steps that have already been supported, claim 20 includes the following steps for which support will be identified. Claim 20 includes the step of receiving the first of a plurality of signals including an identifier from a source external to the receiver station. Support for this step is found in the disclosure of identifiers (*see* 1987 Spec., P. 252, ll. 15-35, P. 435, ll. 16-18; and 1981 Spec., Col. 19, ll. 14-15) which are received at the receiver station from an ITS. *See* 1987 Spec., P. 429, ll. 25-33; P. 449, ll. 13-26; P. 257, l. 24 - P. 258, l. 19; and 1981 Spec., Col. 19, 5-29; Col. 19, ll. 35-41; Col. 9: 53-55.

Claim 20 also includes the step of processing a first signal to provide the first medium of a multimedia presentation. Support for this step is found in the disclosure of the controller (in 1987) or processor (or monitor in 1981) processing signals and determining whether the signals are to be sent on to external equipment or to a buffer comparator or both. *See* 1987 Spec., P. 31, ll. 10-14; P. 446, ll. 17-21; P. 435, ll. 16-18; P. 252, ll. 15-35; and 1981 Spec., Col. 7, ll. 50-54; Col. 19, ll. 27-29, ll. 18-20, ll. 14-15. The signals instruct the controller or microcomputer to cause the monitor or TV set to tune to the WSW program and allow the WSW program (i.e., the first medium) to be displayed as part of the multimedia presentation. *See* 1987 Spec., P. 445, l. 24 - P. 446, l. 1; P. 446, ll. 17-21; and 1981 Spec., Col. 19, ll. 27-29.

Claim 20 as amended specifically sets forth that identifying content of the first medium is based on an identifier. The identifier is included in a first signal that is processed to provide the first medium and the identifier. As discussed above, the 1987 specification discloses identifying content in the description of analyzing identifier signals to identify program specific information. *See* 1987 Spec., P. 28, ll. 18-25; P. 435-437; specifically, P. 436, ll. 26-35; and 1981 Spec., Col. 19, ll. 17-23.

The claim further includes the step of controlling the receiver station, based on the identifying step, to respond to a processor instruction that is received separately from the identifier. Support for this step is found in the disclosure of additional signals that are embedded and transmitted with the WSW program. *See* 1987 Spec., P. 443, ll. 19-24; P. 21, ll. 20-24; P. 447, ll. 8-14; and 1981 Spec., Col. 19, ll. 27-29, ll. 42-44. In the identifying step, the identifier signals allow the controller or microcomputer to cause the monitor or TV set to tune to the WSW program. *See* 1987 Spec., P. 445, l. 24 - P. 446, l. 1; P. 446, ll. 17-21; and 1981 Spec., Col. 19, ll. 27-29. Thus, these signals instructing the monitor or TV set to tune to the WSW program control the receiver station to respond to the additional instruct signals (i.e., the recited processor instructions) that are received in

the WSW program transmission and which are received separately from the identifier signals. *See* 1987 Spec., P. 21, ll. 20-24; and 1981 Spec., Col. 19, ll. 42-44.

Claim 20 includes the step of responding to the processor instruction to coordinate the presentation of a first and second media based on identifying the content of the second media. Support for this step is found disclosure of the microcomputer responding to the instruct signals (i.e., the processor instructions) embedded in the WSW program transmission to transmit a microcomputer generated graphic (i.e., the second medium) to the TV set/monitor to be overlaid on the studio graphic transmitted in the WSW program (i.e., the first medium). *See* 1987 Spec., P. 447, ll. 8-14; P. 25, l. 34 - P. 26, l. 2; and 1981 Spec., Col. 19, l. 59 - Col. 20, l. 1. The transmitting of the microcomputer generated graphic to the TV set/monitor to be overlaid on the studio graphic supports the coordination of the presentation of a first and second media. Further, this coordination is based on identifying the content of the microcomputer generated graphic (i.e., the second medium). Support for identifying the content of the second medium is found in the disclosure of the instruction signal instructing the microcomputer to transmit (i.e., identify) the first overlay (the second medium). *See* 1987 Spec., P. 26, ll. 1-8; and 1981 Spec., Col. 19, ll. 60-66.

Finally, the multimedia presentation is based on the responding step. Support for this step is found in the disclosure of the overlay and display of the microcomputer generated graphic with the studio graphic being based on the microcomputer responding to the instruction signal instructing the microcomputer to transmit the microcomputer generated graphic to the TV set or monitor. *See* 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2.

#### a. Dependent Claim 21

Applicants propose to amend claim 21 to set forth that the step of outputting includes controlling a selective transfer device to transfer one of the first and second

media to an output device. The WSW program is a first medium. The receiver station includes a tuner that transfers the WSW program to the TV monitor. *See* 1987 Spec., P. 445, l. 24 - P. 446, l. 1; and 1981 Spec., Col. 19, ll. 27-29. Accordingly, the tuner is controlled to transfer the WSW to the TV monitor. The signal of the microcomputer generated graphic of the viewer's own portfolio performance is a second medium. The receiver station includes a microcomputer that transfers the generated graphic overlay to the TV monitor. *See* 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, ll. 64-67. Accordingly, the microcomputer is controlled to transfer the generated graphic to the TV monitor.

**b. Dependent Claim 22**

Applicants propose to amend claim 22 to depend from claim 21 and to set forth that the step of controlling comprises originating the second medium. The signal of the microcomputer generated graphic of the viewer's own portfolio performance is a second medium. The graphic is generated based on received instruction signals. *See* 1987 Spec., P. 25, l. 34 - P. 26, l. 11; and 1981 Spec., Col. 19, l. 60 - Col. 20, l. 1.

**c. Dependent Claim 23**

Applicants propose to amend claim 21 to set forth a step of causing a second selective transfer device to store the first medium. The WSW program is a first medium. The receiver station include a second tuner that directs the WSW program to a video recorder. *See* 1987 P. 295, ll. 6-8, P. 445, ll. 24-32; and 1981 Spec., Col. 19, ll. 23-27. Accordingly, the second tuner is controlled to store the WSW program at the video recorder.

The forgoing discussion of written description support for claim 23 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 23 as raised in Example 28 of the FOA.

### 3. Independent Claim 24

Applicants propose to amend claim 24 to set forth a method of outputting a multimedia presentation at a receiver station. The receiver station receives from at least two different sources first and second media that are output in the multimedia presentation. One of the first and second media contains television programming that includes both audio and video. The presentation of the first and second media is coordinated for output based on a step of identifying content of the first medium. The step of identifying content of the first medium is based on a control signal received at the receiver station from a remote transmitter station. The coordinated output of the first and second media is then output at a first and second output device, respectively.

Specification support for this claim is found in the Cooking Show examples of the instant specification and the priority specification. Support in the Cooking Show example for the steps of identifying content of a first medium and coordinating at receiver station a multimedia presentation that is based on the step of identifying have already been discussed in Section II.A above.

In addition to these steps, claim 24 includes the step of receiving at a receiver station first and second media, one of which contains television programming, of the multimedia presentation from at least two different sources. Support for this step is found in the disclosure of a viewer or subscriber at a receiver station watching a Cooking Show (the first media, *see* 1987 Spec., P. 470, ll. 1-21; and 1981 Spec., Col. 20, ll. 16-19) and subsequently receiving a transmission of a specific recipe discussed on the show (the second media, *see* 1987 Spec., P. 473, ll. 3-13; and 1981 Spec., Col. 20, ll. 46-47. These two media are received from two different sources — one source being or box 201 (in 1981) or tuner 215 (in 1987) and the other source being box, 222 (in both 1981 and 1987). *See* 1987 Spec., P. 470, ll. 14-17; P. 477, ll. 12-17, ll. 23-29; and 1981 Spec., Col. 20, ll. 16-19; Col. 20, l. 47. The receipt of these two transmissions of different media constitute the multimedia presentation. Claim 24 also includes the step of receiving a

control signal at the receiver station from a remote transmitter station. Support for this step is found in the disclosure of signals being included in the Cooking Show program transmission. *See* 1987 Spec., P. 471, ll. 26-34, P. 472, ll. 13-15; and 1981 Spec., Col. 20, ll. 27-38.

Claim 24 also sets forth the identification of content of the first medium based on a control signal received from a remote transmitter station. As discussed above, the 1987 specification on page 471 discloses a first received SPAM message that checks for a particular user input. The correct match to the content of the first medium (the appearance of "TV567#", *see* 1987 Spec., P. 472, ll. 13-17) allows the receiver station to output the printed recipe on the printer. The 1981 specification discloses a similar instruction that identifies a prompted user response. *See* 1981 Spec., Col. 20, l. 27.

Finally, claim 24 includes the step outputting at the receiver station the first medium of the multimedia presentation at a first output device and outputting the second medium at a second output device. Support for outputting at the receiver station the first medium of the multimedia presentation at a first output device is found in the disclosure of a viewer or subscriber watching the Cooking Show program on a TV set/monitor. *See* 1987 Spec., P. 470, ll. 1-21; and 1981 Spec., Col. 20, ll. 16-19. Support for outputting the second medium at a second output device is found in the disclosure of the recipe that is transmitted to the receiver station being transferred to a printer for printing. *See* 1987 Spec., P. 473, ll. 3-13; P. 477, ll. 12-17; P. 477, ll. 23-29; P. 475, ll. 1-2; and 1981 Spec., Col. 20, ll. 46-49.

The forgoing discussion of written description support for claim 24 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 24 as raised in Examples 29 and 30 of the FOA.

**a. Dependent Claim 25**

Applicants propose to amend claim 25 to set forth that the first and second output devices comprise a speaker and a printer. Support for first and second output devices comprising a speaker and a printer in the context of the method recited in claim 24 is found in the Cooking Show example disclosed in both specifications. Support for the recited speaker is found in the Cooking Show example in which the viewer/subscriber hears the host say "If you are interested in cooking what we are preparing here..." *See* 1987 Spec., P. 471, ll. 6-13; and 1981 Spec., Col. 20, ll. 19-23. Support for the recited printer is also found in the Cooking Show example in which the recipe is received at the receiver station and transferred to the printer for printing. *See* 1987 Spec., P. 475, ll. 1-2; and 1981 Spec., Col. 20, ll. 48-49.

The forgoing discussion of written description support for claim 25 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 25 as raised in Examples 31 and 32 of the FOA.

**4. Independent Claim 26**

Applicants propose to amend claim 26 to set forth a method of outputting a multimedia presentation at a receiver station. At least two media are received at the receiver station from different sources. Based on processing the two media, content of a first and second of the at least two media is identified. The multimedia presentation is output based on the identification.

Written description support for proposed claim 26 is found in at least the "Wall Street Week" examples. Support for the step of outputting a multimedia presentation based identifying content of a first medium has already been discussed above in Section II.A.

Claim 26 as proposed includes the steps of receiving at a receiver station at least two of a plurality of media from different sources with at least one source being a remote

transmitter station. Support for this step is found in the disclosure of a receiver station receiving the television cablecast/transmission (*see* 1987 Spec., P. 446, ll. 17-21; and 1981 Spec., Col. 19, ll. 27-29) and receiving closing stock price data each weekday (*see* 1987 Spec., P. 449, ll. 13-26; and 1981 Spec. Col. 19, ll. 35-37). Support for media being received from different sources is found in the disclosure of the television cablecast/transmission being transmitted from a remote transmitter (*see* 1987 Spec., P. 250, ll. 13-22; P 289, ll. 12-15; and 1981 Spec., Col. 16, ll. 32-37) and received at the receiver station (*see* 1987 Spec., P. 289, ll. 12-15; and 1981 Spec., Col. 14, ll. 39-41; Col. 19, ll. 5-29), while the stock price data is received on a digital information channel (*see* 1987 Spec., P. 449, ll. 13-35; and 1981 Spec., Col. 19, ll. 35-41). Support for one source being a remote transmitter station is found in the disclosure that the WSW program is received from a ITS. *See* 1987 Spec. P. 429, ll. 26-32; and 1981 Spec., Col. 19, 20-25, ll. 60-63.

In claim 26 the at least two of a plurality of media are processed in order to output a multimedia presentation. Both specifications disclose the processing of the two media in order to output a multimedia presentation. The multimedia presentation that is output is disclosed in both specifications as the composite overlay seen by the viewer comprised of the studio graphic in the WSW program and the microcomputer generated graphic of the viewer/subscriber's stock portfolio performance. *See* 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 60 - Col. 20, l. 2. The two media are processed in order to output the multimedia presentation, as shown in the disclosure of the processor (signal processor, in 1987) passing to the microcomputer all identifier signals contained in the television cablecast/transmission (*see* 1987 Spec., P. 435, ll. 16-25; and 1981 Spec., Col. 19, ll. 17-20) and the disclosure of the stock price data being recorded on the microcomputer (*see* 1987 Spec., P. 449, ll. 13-35; and 1981 Spec., Col. 19, ll. 35-41). The processing of the television cablecast/transmission and the identifier signals contained therein allow the microcomputer to tune to the WSW program and

subsequently output the multimedia presentation. *See* 1987 Spec., P. 439, ll. 9-15; P. 446, ll. 17-21; P. 451, l. 3; and 1981 Spec., Col. 19, ll. 20-29; Col. 19, l. 60 - Col. 20, l. 1.

Further, the content of a first medium and content of a second medium are identified based on the step of processing. Both specifications support this step. Regarding the first medium, the processing of the television cablecast/transmission enables the microcomputer to analyze the content of the identifier signals in the television cablecast/transmission. *See* 1987 Spec., generally, P. 28, ll. 18-25; for example, P. 435, ll. 16-25; P. 436, ll. 23-35; and 1981 Spec., Col. 19, ll. 20-23. Regarding the second medium, the processing of the stock price data allows the microcomputer to identify and access the pertinent stock price data to provide the viewer's stock portfolio performance. *See* 1987 Spec., generally, P. 28, ll. 18-25; specifically, P. 449, l. 13; and 1981 Spec., Col. 19, ll. 35-41.

Both specifications support the recitation that based on this identifying step, a multimedia presentation is outputted. Based on the identification of the identifier signals in the television cablecast/transmission, the microcomputer instructs the TV set or monitor in order to display the WSW program. *See* 1987 Spec., generally, P. 28, ll. 18-25; specifically, P. 449, ll. 13-26; P. 437, l. 6; P. 295, ll. 6-13; P. 446, ll. 17-21; and 1981 Spec., Col. 19, ll. 20-29. Accordingly, based on this identifying step, the multimedia presentation, which includes the studio graphic contained in the WSW program, is output. Based on the identification of the recorded stock price data, the microcomputer is able to provide the viewer/subscriber's stock portfolio performance. *See* 1987 Spec., P. 451, l. 3; P. 25, l. 34 - P. 26, l. 11; and 1981 Spec., Col. 19, ll. 48-53, Col. 19, l. 67 - Col. 20, l. 1. Accordingly, based on this identifying step, the multimedia presentation, which includes the microcomputer generated graphic, is output.

Finally, the multimedia presentation is comprised of a sequential or simultaneous presentation of information based on the first media and information based on the second media. Support for this step is found in both specifications' description of the

construction and display of the composite overlay seen by the viewer comprised of the studio graphic in the WSW program and the microcomputer generated graphic of the viewer/subscriber's stock portfolio performance (i.e., the multimedia presentation). *See* 1987 Spec., P. 451, ll. 7-11; P. 25, ll. 26-33; P. 26, ll. 20-28; and 1981 Spec., Col. 19, l. 48 - Col. 20, l. 2. The composite overlay seen by the viewer is the simultaneous display of the graphic transmitted in the WSW program and the microcomputer generated graphic of the viewer/subscriber's stock portfolio performance. *See* 1987 Spec., P. 26, ll. 1-8; and 1981 Spec., Col. 19, l. 67 - Col. 20, l. 2. Both specifications further disclose that after the first microcomputer generated graphic is overlaid on the studio graphic, the next microcomputer generated graphic will be sequentially overlaid to be displayed as part of the multimedia presentation. *See* 1987 Spec., P. 451, ll. 25-32; and 1981 Spec., Col. 19, ll. 48-51, Col. 20, ll. 2-7.

The forgoing discussion of written description support for claim 26 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 26 as raised in Examples 33, 34, and 35 of the FOA.

**a. Dependent Claim 27**

Applicants propose to amend claim 27 to set forth that the receiver station includes a storage device. The two media are stored at the receiver station. The WSW programming and the signals including the stock price data are two media. The WSW programming is stored on a video recorder. *See* 1987 Spec., P. 446, ll. 18-23; and 1981 Spec., Col. 19, ll. 24-27. The receiver station thus includes a storage device and the first medium is stored at the receiver station. The stock price data is also stored at the receiver station. *See* 1987 Spec., P. 449, ll. 13-35; and 1981 Spec., Col. 19, ll. 35-41. Accordingly, the two media are stored at the receiver station.

**b. Dependent Claim 28**

Applicants propose to amend claim 28 to depend from claim 26 and to set forth originating a portion of the multimedia presentation at the receiver station based on the step of storing. The graphic of the viewer's portfolio performance (a portion of the multimedia presentation ) is originated at the receiver station. *See 1987 Spec., P. 26, ll. 4-10; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 1.* The generation of the graphic overlay is based on the storing of the stock price data and the WSW program as the generation of the overlay is based on WSW program and the stock data. *See 1987 Spec., P. 442, ll. 7-21; P. 449, ll. 13-20; and 1981 Spec., Col. 16, ll. 32-47; Col. 19, l. 60 - Col. 20, l. 2; Col. 19, ll. 39-41.*

**5. Independent Claim 29**

Applicants propose to amend claim 29 to set forth a method of outputting a multimedia presentation at a receiver station. In this method a video image from a series of created images is outputted into the multimedia presentation. A control signal is processed at the receiver station that programs a processor to create a series of discrete video images. Content of a first medium is identified. Based on this identification, an image of the series of discrete images is output. The outputted image and the medium are combined into the multimedia presentation.

Written description support for proposed claim 29 is found in at least the WSW examples. Support for the general concept of outputting a multimedia presentation at a receiver station has been discussed in Section II.A above. The output device at the receiver station at which a multimedia presentation is outputted is described as a TV set or monitor in both disclosures. *See 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2.*

In claim 29 a control signal programs a processor to create a series of discrete video images. The 1987 specification discloses that the first message of the WSW example instructs a microcomputer at the receiver station to generate a plurality of

overlays. *See* 1987 Spec., P. 23, l. 35 - P. 24, l. 27; P. 451, ll. 7-11. Likewise, the 1981 specification discloses that instruction signals embedded in the WSW programming transmission are output to a microcomputer and instruct the microcomputer at the receiver station to generate several graphic video overlays upon command. *See* 1981 Spec., Col. 19, ll. 46-49. Accordingly, a control signal programs the microcomputer to create a series of discrete video images.

The proposed amendment to claim 29 further sets forth a step of identifying a first medium to be output in the multimedia presentation. In the 1987 WSW example, the receiver station identifies and tunes to the WSW program (i.e., the recited first medium) by a comparison of specific WSW information that is preprogrammed on the microcomputer and the specific WSW information that is contained in messages in the cablecast which are received at the receiver station. *See* 1987 Spec., generally, P. 28, ll. 18-25; P. 427-447; specifically, P. 435, ll. 16-25; P. 436, l. 23 - P. 437, l. 3; P. 439, ll. 9-15; P. 446, ll. 17-21. In the 1981 WSW example, the receiver station identifies and tunes to the WSW program (i.e., the recited first medium) by analyzing the program and channel identifiers on all programming being cablecast. *See* 1981 Spec., Col. 19, ll. 12-29.

Claim 29 further requires that a video image of the series of discrete video images is output based on the identifying step. Both specifications support this recitation. In both WSW examples, the receiver station identifies the content (the WSW program) of a medium or signal (the particular channel that carries WSW). Thus, functions controlled by instructions embedded in the WSW program (*see* 1987 Spec., generally, P. 447, ll. 8-14; specifically, P. 25, l. 34 - P. 26, l. 11; and 1981 Spec., Col. 19, l. 42 - Col. 20, l. 10.) are based on the step of identifying.

One such function in the WSW example is the generation and transmission of a series of overlays of the user's stock performance to the receiver station. The 1987 specification discloses at page 26, lines 4-8, a signal that causes the microcomputer to

overlay the information in its graphics card onto the received composite video information and transmit the combined information to the TV monitor. The 1981 specification likewise discloses a signal that causes the microcomputer to transmit the first overlay to the TV set. *See* 1981 Spec., Col. 19, ll. 64-66. These series of overlays are discrete video images that are output at the TV set at the receiver station. Accordingly, both disclosures support causing a video image of the series of discrete video images to be output based on the step of identifying a first medium to be output in the multimedia presentation.

Finally, in claim 29 the outputted video image is combined with the first medium into a multimedia presentation based on the step of causing the video image to be output. Both specifications disclose one of the series of microcomputer generated graphics to be overlaid (i.e., combined) with the studio graphic in the WSW program (i.e., the first medium) to depict a combined graphic overlay (i.e., the multimedia presentation) that is displayed at the TV set (the output device). *See* 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2.

The overlay of the microcomputer generated graphic onto the studio graphic (i.e., the combining) is based on an instruction signal instructing the microcomputer to transmit and display of the microcomputer generated graphic at the TV set. *See* 1987 Spec., P. 26, ll. 1-11; P. 451, l. 3; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2.

The forgoing discussion of written description support for claim 29 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 29 as raised in Examples 39, 40, 41 and 42 of the FOA.

#### a. Dependent Claim 30

Applicants propose to amend dependent claim 30 to recite processing an identifier and further comprising the step of receiving the identifier from a remote transmitter

station. In the context of the WSW example, above, the identifier is supported in the 1987 specification as signals that inform the microcomputer of new programming transmissions to which the microcomputer can tune. *See* 1987 Spec., P. 435, l. 14 - P. 436, l. 1; P. 267, ll. 20-28. In the 1981 specification, the identifier is supported by the disclosed identifier signals which instruct the microcomputer to tune to certain programming. *See* 1981 Spec., Col. 19, ll. 14-23.

The remote transmitter station is identified in the 1987 specification as the intermediate transmitter station of Figs. 6A-B. In the 1981 specification, Figs. 3A-C identify the remote transmitter station.

## **6. Independent Claim 33**

Applicants propose to amend claim 33 to set forth a method of outputting a multimedia presentation at a receiver station. The receiver station receives a first signal from a remote transmitter station that is output at the receiver station. A user response is received at the receiver station based on the output of the first signal at the receiver station. Content of the first signal is identified and a step of comparing the identified content to data stored at the receiver station results in tuning the receiver station to receive a second signal. Finally, the multimedia presentation is output at the receiver station that comprises information in both the first and second signal.

Specification support for this claim is found in the Cooking Show example in the instant specification and the priority specification. Proposed amended claim 33 sets forth receiving a first signal from a remote transmitter station and outputting the signal at the receiver station. The Cooking Show example in both specifications discloses a viewer receiving the Cooking Show program (the first signal) from a remote station. *See* 1987 Spec., P. 469, l. 1 - P. 470, l. 21; and 1981 Spec., Col. 20, ll. 16-19.

Based on outputting the signal at the receiver station the receiver station receives a user response. Both specifications support this step in their disclosure of the viewer

inputting a specific number to indicate that the viewer wishes to have the recipe sent for printing at the viewer's location. *See* 1987 Spec., P. 471, ll. 14-21; and 1981 Spec., Col. 20, ll. 23-26. The viewer's request to send the recipe (i.e., the user input) is based on what the viewer sees or hears (i.e., the outputting of the signal at the receiver station). *See* 1987 Spec., P. 471, ll. 6-13; and 1981 Spec., Col. 20, ll. 17-23.

Claim 33 further includes the step of identifying content of a first signal. In the Cooking Show example, an instruction is received at the receiver station indicating that the receiver station should check for particular user input (the first SPAM message on page 471 of the 1987 specification). This instruction must include the identity of the correct user response. As the correct user response is matched to a prompt included as content of the cooking program ("TV567#" appears on the screen of the users television, 1987 Spec., P. 471, ll. 12-13), when the receiver station processes this response, it identifies content of the cooking program. *See* 1987 Spec., P. 473, l. 6; P. 45, ll. 10-20. The 1981 specification discloses a similar instruction that identifies a prompted user response. The instruction is the signal identified on the incoming programming (i.e., the content). *See* 1981 Spec., Col. 20, l. 27. Accordingly, both specifications disclose the step of identifying content of a first signal.

In claim 33, the identified content of a first signal is compared to data stored at the receiver station to enable the tuning to a second signal for information of the same to be included with information of the first signal. The identified content of the first signal is supported by the specific number that is contained in the signal indicating that the receiver station should check for particular user input (the first SPAM message on page 471 of the 1987 specification). The viewer response (*see* 1987 Spec., P. 471; and 1981 Spec., Col. 20, l. 24) is stored at the receiver station and is compared with the incoming SPAM signal (*see* 1987 Spec., P. 472, ll. 13-17) or the instruction signal (*see* 1981 Spec., Col. 20, ll. 31-32). This comparison enables the receiver station to be tuned to receive a second signal. This step is supported by the Cooking Show example, in which the match

between information in the user response and information stored at the receiver station allows the receiver station to tune to the appropriate channel to receive the encoded recipe (the second signal). *See* 1987 Spec., P. 476, l. 34 - P. 477, l. 17; and 1981 Spec., Col. 20, ll. 31-36.

Finally, the multimedia presentation, comprised of information included in the two signals, is output at the receiver station. The multimedia presentation is supported by the disclosure of the printing of a recipe at the receiver station in connection with the output of a Cooking Show program at the TV set or monitor. *See* 1987 Spec., P. 475, ll. 1-2; P. 470, ll. 19-21; and 1981 Spec., Col. 20, ll. 46-49, ll. 16-19. Both signals, which are the recipe sent at the receiver station and the Cooking Show program sent to the receiver station, contain information that comprises the printing of a recipe at the receiver station in connection with the output of a Cooking Show program at the TV set or monitor (the multimedia presentation).

The forgoing discussion of written description support for claim 33 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 33 as raised in Example 47 of the FOA.

#### a. Dependent Claim 34

Applicants propose to amend claim 34 to correct an obvious typographical error of originally reciting an "apparatus" of dependent claim 33, rather than the "method" of claim 33. Additionally, the antecedent basis for "a user response" has been corrected by now reciting "said user response."

The 1987 specification support for claim 34 is found generally at page 28, lines 25-35, and page 31, line 30 to page 31, line 2, reciting that signal processor (of Fig. 7) has the capacity for transferring meter records to a remote station for program and information consumption monitoring. Support to the 1981 specification is identified at

column 20, lines 54-58, where signal processor 200 transfers the data in data recorder 16 via a telephone line to a remote site for billing purposes.

The user response is the subscriber's input of "567" into the receiver station apparatus in response to the prompt in the television programming (*see* 1987 Spec., P. 471, ll. 6-25; and 1981 Spec., Col. 20, ll. 19-26).

The forgoing discussion of written description support for claim 34 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 34 as raised in Example 48 of the FOA.

**b. Dependent Claim 35**

Applicants propose to amend claim 35 to correct an obvious typographical error of originally reciting an "apparatus" of dependent claim 33, rather than the "method" of claim 33.

The 1987 specification support for claim 35 is found at page 472, lines 23-27, wherein the user response of particular program unit information is stored in buffer 14. Likewise, in the 1981 specification, the signal processor conveys information that the "567" order was placed by the viewer in its data recorder. *See* 1981 Spec., Col. 19, ll. 42-45.

The forgoing discussion of written description support for claim 35 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 35 as raised in Example 49 of the FOA.

**c. Dependent Claim 36**

Applicants propose to amend claim 36 to correct an obvious typographical error of originally reciting an "apparatus" of dependent claim 33, rather than the "method" of claim 33.

The 1987 specification identifies the use of a telephone line to transmit information at page 28, lines 25-35, and page 32, lines 16-20. So does the 1981 specification, at column 20, lines 54-56.

### 7. Independent Claim 37

Applicants propose to amend claim 37 to set forth a multimedia presentation apparatus. Generally, the apparatus of claim 37 corresponds to the method described in claim 2 for a multimedia presentation based on a plurality of signals including at least two media. The apparatus includes a storage device for storing a first medium to provide a first portion of the multimedia presentation. At least one processor coordinates presentation of the first portion of the multimedia presentation with a presentation of a received second medium based on determining content of the second medium. An output device outputs the multimedia presentation based on the coordination such that content of the first portion of the multimedia presentation has a predetermined relationship to content of the second medium. At least one receiver receives the plurality of signals including the two media where at least a portion of the plurality of signals is received from a source external to the receiver station.

Written description support for the apparatus described in claim 37 is found in at least the microcomputer, its resident processors, and connected output devices disclosed in both the 1987 and 1981 specifications, which generate and/or display multimedia presentations. Specifically, the storage device is supported by the disclosure of the microcomputer (*see* 1987 Spec., P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2); the processor is supported by the disclosure of a microcomputer in 1981 (*see* 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2) and the disclosure of the controller in 1987 (*see* 1987 Spec., P. 295, ll. 6-8; P. 439, ll. 9-15; *see also* Figs. 5, 7A-7C) and output devices is supported by the disclosure of various devices controlling output (*see* 1987 Spec., P. 25, ll. 26-33; and 1981 Spec., Col. 19, ll. 27-29). The recitation of at least one receiver is

supported by the disclosure receiving devices in both specifications. *See* 1987 Spec., P. 449, ll. 13-26; P. 21, ll. 20-24; P. 23, l. 35 - P. 24, l. 4; P. 471, ll. 6-9; and 1981 Spec., Col. 19, ll. 35-37, ll. 45-49.

The steps that the apparatus of claim 37 performs are very similar to the steps described in method claim 2. Accordingly, written description support for the aforementioned apparatus as they are used to perform the steps described in claim 37 is identified above by applicants in the discussion of written description support for the steps claim 2.

The forgoing discussion of written description support for claim 37 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 37 as raised in Examples 50, 51, 54 and 55 of the FOA.

**a. Dependent Claim 38**

Applicants propose to amend claim 38 to recite that the processor determines content of a second medium by processing an identifier from a source external to the multimedia presentation apparatus. Proposed claim 38 also now recites a detector for detecting an identifier.

The support for a processor determining content of second medium by processing an identifier from a source external to the multimedia presentation apparatus is found in the context of the WSW example, wherein the identifier is supported in the 1987 specification as signals that inform the microcomputer of new programming transmissions to which the microcomputer can tune. *See* 1987 Spec., P. 436, l. 9 - P. 437, l. 3. In the 1981 specification, the identifier is supported by the disclosed identifier signals. *See* 1981 Spec., Col. 19, ll. 17-23. Support for determining the content of the second medium (the studio graphic image, *see* 1987 Spec., P. 25, ll. 26-33; and 1981 Spec., Col. 19, ll. 53-56) by processing an identifier (e.g., specific WSW information) is

found generally in the 1987 specification at page 28, lines 18-25, page 252, lines 15-35, and specifically at page 436, line 23 to page 437, line 3, and in the 1981 specification at column 19, lines 14-23.

**b. Dependent Claim 39**

Applicants propose to amend claim 39 to recite a multimedia presentation apparatus receiving a multichannel signal. The apparatus further comprises a converter connected to a receiver for communicating a portion of the multichannel signal. The 1987 support for the source external to the apparatus transmits multichannel signals is found at page 435, lines 16-18, that recite "all channels" and the 1981 support for the recitation "multi-channel system" is found at column 19, lines 14-15.

The converter for communicating a portion of the multichannel signal is supported in the 1987 specification by the converter 201 (*see* 1987 Spec., P. 295, ll. 6-8; P. 439, ll. 9-15; and Fig. 7) and is supported in the 1981 specification by the switch box 201 (*see* 1981 Spec., Col. 19., ll. 24-25; and Fig. 6C).

**c. Dependent Claim 40**

Applicants propose to amend claim 40 to recite a first controlled device operatively connected to a processor for causing a converter to select a second medium. The features of claim 42 are disclosed in both specifications. The 1987 specification discloses that the controller (the processor, connected to the first controlled device) causes selected tuner, 214 (the first controlled device), to tune to the frequency of cable channel 13 channel to receive programming on that channel, thereby causing converter box, 201(the converter), to convert its received information of a certain frequency and receive the transmission of cable channel 13 (selecting the second medium) to be later output at a TV monitor. *See* 1987 Spec., P. 295, ll. 6-8; P. 439, ll. 9-15; *see also* Figs. 5, 7A-7C.

Similarly, the 1981 specification discloses that microcomputer (the processor, connected to the first controlled device) may instruct tuner, 214 (the first controlled device), to switch box, 201 (the converter), to tune to a certain channel to receive programming (selecting the second medium) on that channel. *See 1981 Spec., Col. 19, ll. 23-25; see also Figs. 5, 6A-6C.*

**d. Dependent Claim 41**

Applicants propose to amend claim 41 to recite a second storage device operatively connected to the converter for storing the second medium. The features of claim 41 are supported in both disclosures. The 1987 specification describes that microcomputer enables information to be input at the controller (the processor, connected to the first controlled device), causing the controller to cause cable converter box, 201 (the converter), to receive the transmission of cable channel 13 (selecting the second medium), and controller causes tuner, 214 (the first controlled device), to tune to the frequency of cable channel 13. *See 1987 Spec., P. 437, ll. 1-6; P. 439, ll. 9-15; P. 295, ll. 6-8; see also Figs. 5, 7A-7C.* Instructions further cause controller to switch power on to video recorder/player, 217 (the second storage device, connected to the converter) and record the WSW program (the second medium). *See 1987 Spec., P. 446, ll. 18-23; see also Fig. 7C.*

Similarly, the 1981 specification discloses that microcomputer (the processor, connected to the first controlled device) may instruct tuner, 214 (the first controlled device), to switch box, 201 (the converter), to tune to a certain channel and instruct control system to turn video recorder (the second storage device, connected to the converter) on and record the WSW program (the second medium). *See 1981 Spec., Col. 19, ll. 23-27; Col. 19, ll. 35-41; see also Fig. 6C.*

**e. Dependent Claim 42**

Applicants propose to amend claim 42 to recite a second controlled device for causing the second storage device to store the second medium. The additional features of claim 42 are supported in both disclosures. The 1987 specification discloses that decoder, 218 (the second controlled device, connected to the processor), will switch power on to video recorder/player, 217 (the second storage device) and cause video recorder/player to record the inputted audio and video information (the second medium). *See 1987 Spec., P. 446, ll. 7-23; P. 439, ll. 9-15; see also Figs. 5, 7A-7C.* Similarly, the 1981 specification discloses that microcomputer (the processor, connected to the first controlled device) may instruct tuner, 214 (the first controlled device), to switch box, 201 (the converter), to tune to a certain channel and instruct control system (the second controlled device, connected to the processor) to turn video recorder (the second storage device) on and record the WSW program (the second medium). *See 1981 Spec., Col. 19, ll. 23-27; see also Figs. 5, 6A-6C.*

**8. Independent Claim 43**

Applicants propose to amend claim 43 to set forth a method of enabling a receiver station to output a multimedia presentation. Claim 43 is similar to claim 2. Claim 43 is directed to the receipt and subsequent transmission of information from a transmitter station to a receiver station in order to allow the receiver station to coordinate and output a multimedia presentation that is coordinated and outputted in much the same manner as the multimedia presentation described in claim 2. In claim 43 an information transmission causes a receiver station to determine content of a second medium, to coordinate presentation of a first portion of the multimedia presentation with presentation of a second medium based on the determination, and to output a portion of the multimedia presentation based on the coordination. The information transmission is received at a transmitter station and is transmitted to the receiver station.

The steps of receiving an information transmission at a transmitter station in a network wherein said information transmission is adapted to cause a receiver station to determine the content of a second medium, coordinate the presentation of a first portion of a multimedia presentation with the presentation of a second medium based on the content of the second medium is supported in both specifications. The 1987 specification supports these steps at least in the disclosure of signal processing apparatus (outlined in Figures 2, 2A, 2B, 2C, and 2D) that can be used to automate the operations of intermediate transmitter stations (ITS) that receive and retransmit programming. *See generally* 1987 Spec., P. 324, ll. 8-17; Figs. 6A-6B; and specifically P. 429, ll. 29-33. The 1981 specification similarly supports the recited steps by at least the disclosure of a facility receiving transmissions which contains a signal processing apparatus (outlined in Figures 1A, 2B, and 2C) that can be used to automate the operations of an intermediate transmission point which can transmit a single channel of information or many channels of information. *See* 1981 Spec. generally, Col. 10, ll. 15-39; Col. 12, l. 66; and specifically, Col. 19, ll. 14-23.

The ITS facilities receive programming transmissions (i.e., the information transmission) from many sources. 1987 Spec., P. 324, ll. 23-31; P. 429, ll. 26-30; and 1981 Spec., Col. 10, ll. 30-39. At the ITS facility program identifier signals are passed in the programming transmissions (i.e., the information transmission is adapted for control) and they are transmitted from the stations. 1987 Spec., P. 327, l. 35 - P. 329, l. 1; P. 429, ll. 26-32; P. 435, l. 16 - P. 436, l.1; and 1981 Spec., Col. 11, ll. 19-57; Col. 19, ll. 14-15. The identifiers or signal are processed at the receiver station to allow the receiver station to tune to the correct channel to receive the WSW program transmission (i.e., determine the content of a second medium). *See generally* "specific WSW information" discussed in 1987 Spec., P. 428-439; and 1981 Spec., Col. 19, ll. 5-27. When the receiver station receives the WSW program transmission (i.e., the information transmission), the embedded signals instruct the microcomputer to generate graphic overlays based on the

viewer's stock portfolio performance (i.e., coordinate the presentation of a first portion of a multimedia presentation). *See* 1987 Spec., P. 40, l. 31 - P. 41, l. 3; P. 18, ll. 24-27; P. 447, ll. 8-14, P. 23, l. 35 - P. 26, 4, P. 451, ll. 7-11; P. 26, ll. 20-28; and 1981 Spec., Col. 19, l. 30-67. The microcomputer generated graphic is then overlaid (or coordinated with) on the studio graphic (i.e., the second medium based on the content of the second medium) to form the multimedia presentation. *See* 1987 Spec., P. 451, ll. 3; P. 26, ll. 4-11; and 1981 Spec., Col. 19, l. 64 - Col. 20, l. 2.

The step of outputting the multimedia presentation based on coordinating the first portion of the presentation with the presentation of the second medium is also supported in both specifications. The output of the combined images (the multimedia presentation) is based on step of coordinating the two images (the first portion of the presentation and the second medium). *See* 1987 Spec., P. 451, l. 3; P. 451, ll. 7-11; P. 26, ll. 8-11; P. 26, ll. 20-28; and 1981 Spec., Col. 19, l. 48 - Col. 20, l. 2.

Additionally, the recitation of "a receiver station in a network to output a multimedia presentation..." in claim 43 is supported in both specifications by the disclosure of various transmitter and receivers being connected in a network. *See* 1987 Spec., P. 49, l. 26 - P. 50, ll. 4; and 1981 Spec., Col. 15, ll. ll. 57-62.

Finally, the recitation of "transmitting said information transmission to said receiver station *before a specific time*" is supported in the 1987 specification by at least the disclosure of the GRAPHICS OFF command causing the microcomputer to cease the overlay (display) of the graphic information onto the received composite video (together, the multimedia presentation) and to commence transmitting the received composite video transmission unmodified. *See* 1987 Spec., P. 26, l. 33 - P. 27, l. 9. The "*before a specific time*" recitation is supported in the 1981 specification at least by the disclosure of the cessation of an instruction signal being sent when the studio graphics are no longer displayed and the cessation of the microcomputer's transmission of its own generated graphic to the TV set. *See* 1981 Spec., Col. 20, ll. 2-7. Accordingly, the information

transmission must occur before a certain time (i.e., before the GRAPHICS OFF command causes the microcomputer to commence transmitting the unmodified WSW program or before the microcomputer is instructed to send the next graphic overlay).

The forgoing discussion of written description support for claim 43 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 43 as raised in Example 56 of the FOA.

**a. Dependent Claim 44**

Applicants propose to amend claim 44 to recite wherein said receiver station determines said content of said second medium by processing a first identifier, said method further comprising the step of transmitting said first identifier.

The support for a processor determining content of second medium by processing a first identifier is found in the context of the "Wall Street Week" example, wherein the identifier is supported in the 1987 specification as signals that inform the microcomputer 205 of new programming transmissions to which the microcomputer can tune. *See* 1987 Spec., generally, P. 28, ll. 18-25; 267, ll. 20-28; specifically, P. 436, l. 23- P. 437, l. 2. In the 1981 specification, the identifier is supported by the disclosure of identifier signals. *See* 1981 Spec. Col. 19, ll. 14-23. Support for determining the content of the second medium, the studio graphic image, *see* 1987 spec., P. 25, ll. 26-33; and 1981 Spec., Col. 19, ll. 53-56) by processing an identifier (e.g., specific WSW information) is found generally in the 1987 specification at page 28, lines 18-25, page 252, lines 15-35, and specifically at page 436, line 23 to page 437, line 3, and in the 1981 specification at column 19, lines 14-23.

Support for transmitting the first identifier is found in the 1987 specification generally at Fig. 6 and at page 337, lines 1-8. Specific support for this step is found in

the 1987 specification at page 431, line 26 to page 432, line 18, and page 434, lines 27-35, lines 1-8, and in the 1981 specification at column 12, lines 45-47.

**b. Dependent Claim 45**

Applicants propose to amend claim 45 to recite including said first identifier in said information transmission. This identifier in the 1987 specification is program unit identification code described generally on page 252, lines 15-35, and specifically at page 431, line 26 to page 432, line 18, and page 434, lines 27-35, lines 1-8. Support for this feature exists in the 1981 specification in the disclosure of the program and channel identifier described in column 19, lines 14-15.

**c. Dependent Claim 46**

Applicants propose to amend claim 46 to recite wherein said receiver station processes a portion of said first medium based on a second identifier, said method further comprises the step of transmitting said second identifier. The first medium (subscriber's stock price data, *see* claim 43) is processed based on an identifier. *See* 1987 Spec., P. 449, ll. 13-35; and 1981 Spec., Col. 19, ll. 35-41. The transmission of the identifier takes place when the first medium is transmitted as related in independent claim 43: in the 1987 specification at page 449, lines 13-15 (*see also* 1987 Spec., 449, ll. 20-26; P. 420, l. 32 - P. 421, l. 17) and in the 1981 specification at column 19, lines 35-40.

**d. Dependent Claim 47**

Applicants propose to amend claim 47 to recite wherein said receiver station commences storing said portion of said first medium at a particular time, said method further comprising the step of transmitting said portion of said first medium to said receiver station before said particular time. Storing a portion of the first medium (stock price data) is supported in the 1987 specification at page 449 lines 13-20, and in the 1981 specification at column 19 lines 39-41. The first medium (stock price data) is transmitted before the particular time, e.g., after the receiver station queries the remote data source after the market

closing each day and before the station commences storing the stock price data, which is supported in the 1987 specification at page 449 lines 13-35, and in the 1981 specification at column 19 lines 35-41.

**e. Dependent Claim 48**

Applicants propose to amend claim 48 to recite wherein said receiver station is controlled, based on said first identifier (program identifier signals, *see* claim 44 above), to respond to a processor instruction which is received at said receiver station separately from said first identifier, said method further comprising the step of including said processor instruction in said information transmission. Controlling the receiver station based on the program identifier signals to respond to a processor instruction (instruction signal generated at the origination studio and embedded in the television programming transmission, *see* 1987 Spec., P 25, l. 34 - P. 26, l. 2; and 1981 Spec., Col. 19, l. 60 - Col. 20, l. 2) is supported by the disclosure of microcomputer being preprogrammed to respond in a predetermined fashion to instructions signals embedded in the programming transmission. *See* 1987 Spec., P. 21, ll. 20-24; and 1981 Spec., Col. 19, ll. 42-44.

**f. Dependent Claim 49**

Applicants propose to amend claim 49 to recite transmitting said processor instruction from said transmitter station to said receiver station at said specific time. In both disclosures the origination station originates the instruct signal (supported in claim 48, above) for receipt at the receiver station, supported by the 1987 specification at page 25, line 35 to page 26, line 1, and the 1981 specification at column 19 lines 60-63. The intermediate station receives and retransmits the instruct signal (the processor instruction). *See* 1987 Spec., P. 429, ll. 25-33; P. 289, ll. 12-15, P. 250, ll. 13-22; P. 449, ll. 13-26; and 1981 Spec., Col. 10, ll. 24-38; Col. 12, ll. 46-51; Col. 18, ll. 46-56.

## 9. Independent Claim 51

Applicants propose to amend claim 51 to set forth a transmitter apparatus for enabling a receiver station to output a multimedia presentation. Generally, the apparatus of claim 51 corresponds to the method described in claim 43 of enabling a receiver station to output a multimedia presentation. The apparatus includes a receiver for receiving a first of a plurality of signals that cause a receiver station to determine content of a second medium, to coordinate presentation of a first portion of the multimedia presentation with a presentation of the second medium based on the determination, and to output the multimedia presentation based on the coordination. A transmitter is connected to the receiver for transmitting the first of the plurality of signals.

Written description support for the transmitter apparatus described in claim 37 is found in at least the disclosure in both the 1987 and 1981 specifications of signal processor apparatus located at intermediate transmission stations which are used to automate the operations of the intermediate transmission stations. *See* 1987 Spec., P. 324, lines 8-17; 1981 Spec., Col. 10, lines 15-39. The transmitter being "operatively connected to said receiver for transmitting said first of said plurality of signals to said receiver station before a specific time" is also supported in both the 1987 and 1981 specifications. Figure 3A-3C of the 1981 specification and Figures 6A and 6B 1987 specification disclose television video and audio receivers, 58 and 59, that are located at the intermediate transmitter stations and which are connected to the intermediate transmitter station facility and the transmitter at such facility. *See* 1987 Spec., P. 324, line 23 - P. 325, line 4; 1981 Spec., Col. 10, lines 30-47.

Support for the recitation of a receiver station being adapted to receive a plurality of signals, store a first medium to provide a first portion of a multimedia presentation, determine content of a second medium, coordinate presentation of the first portion of the multimedia presentation with a presentation of the second medium based on determining the content, and output said multimedia presentation based on coordinating the

presentation of the first portion of the multimedia presentation with the presentation of said second medium has already been identified in the above section directed to the support for claim 43.

Similarly, the support for the transmission of a first of a plurality of signals to a receiver station “*before a specific time*” is identical to the support identified above for the recitation in claim 43 of the transmission of information to a receiver station “*before a specific time*.”

The forgoing discussion of written description support for claim 51 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner’s concerns with the specification support for claim 51 as raised in Example 66 of the FOA.

**a. Dependent Claim 52**

Claim 52 remains unamended. The signal generator for communicating a second of said plurality of signals is supported in the 1987 specification (*see* P. 354, ll. 21-24) where control instructions are generated for insertion into the television program transmission (*see* P. 22, ll. 1-6), and in the 1981 specification which describes signal generators 82, 86, and 90 (*see* Col. 12, ll. 38-42).

The second receiver for communicating a second of said plurality of signals is supported in the 1987 specification at page 324 lines 23-31 and in the 1981 specification at column 10 lines 40-41 as other electronic programming input means, 62.

The forgoing discussion of written description support for claim 52 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner’s concerns with the specification support for claim 52 as raised in Example 67A of the FOA.

**b. Dependent Claim 53**

Applicants propose to amend claim 53 to correct an obvious error of the recitation from a “method” to an “apparatus.” Additionally, the antecedent basis for the first of the plurality of signals has been corrected. The support for one of a combiner and a multiplexer for combining said first of said plurality of signals and said second of said plurality of signals is found in the disclosure of the channel combining system and multiplexer 92 (*see* 1987 Spec., P. 325, ll. 1-4; Fig. 6B; and 1981 Spec., Col. 10, ll. 43-47; Fig. 3C).

The forgoing discussion of written description support for claim 53 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner’s concerns with the specification support for claim 53 as raised in Example 67B of the FOA.

**c. Dependent Claim 54**

Applicants propose to amend claim 54 to recite wherein said receiver station determines said content of said second medium by processing a first identifier, said apparatus further comprising a first processor for outputting said first identifier.

1987 specification support for a first processor for outputting said first identifier corresponds to controller and computer 73. *See* 1987 Spec., P. 325, ll. 19-20. The 1981 specification support is also found in the disclosed controller and computer 73. *See* 1981 Spec., Col. 11, ll. 15-17.

**d. Dependent Claim 55**

Applicants propose to amend claim 55 to recite wherein said receiver station processes a portion of said first medium based on a second identifier. The first medium (subscriber’s stock price data, *see* claim 43) is processed based on an identifier, supported the 1987 specification as the stock price data at page 449 lines 13-35 and in the 1981 specification at column 19 lines 35-41.

The claim also recites the apparatus further comprising a selective transfer device operatively connected to said transmitter for communicating at least one of said first identifier and said second identifier to said transmitter. Support for this recitation of a selective transfer device is found in the disclosure of matrix switch 75. *See* 1987 Spec., P. 328, l. 22 - P. 329, l. 1; and 1981 Spec., Col. 11, ll. 50-57. The matrix switch communicates all program transmissions (including the first identifier in the WSW program and the second identifier in the stock price data) to the transmitter at the ITS as shown in Figs. 6A and 6B (1987 Spec.) and Figs. 3A and 3B (1981 Spec.). *See* 1987 Spec., P. 449, ll. 13-26; P. 420, l. 21 - P. 421, l. 6; P 429, ll. 20-32; P. 325, 1-9 (disclosing the transmission of WSW and stock price data from an ITS); and 1981 Spec., Col. 18, ll. 48-55; Col. 19, ll. 14-23, ll. 35-41 (disclosing the transmission of financial news, WSW and stock price data on a multichannel cable transmission).

**e. Dependent Claim 56**

Applicants propose to amend claim 56 to recite wherein said selective transfer device communicates said first identifier and said second identifier, said apparatus further comprising a controller operatively connected to said selective transfer device for controlling said selective transfer device to communicate said first identifier and said second identifier at different times.

Support for this recitation of a selective transfer device is found in the disclosure of matrix switch 75. *See* 1987 Spec., P. 328, l. 22 - P. 329, l. 1; and 1981 Spec., Col. 11, ll. 50-57. The matrix switch communicates all program transmissions (including the first identifier in the WSW program and the second identifier in the stock price data) to the transmitter at the ITS as shown in Figs. 6A and 6B (1987 Spec.) and Figs. 3A and 3B (1981 Spec.). Both specifications further support a controller connected to the selective transfer device for controlling the selective transfer device to communicate the first and second identifiers at different times. In the specifications it is disclosed that a controller/computer,

73, has means for communicating control information with matrix switch to instruct matrix switch to configure its switches to transfer programming transmissions to output leading to modulator 87. *See* 1987 Spec., P. 328, ll. 14-16; P. 328, l. 31 - P. 329, l. 1; and 1981 Spec., Col. 11, ll. 44-46; Col. 11, ll. 54-57. The recitation that the selective transfer device communicates the first and second identifiers at different times is supported by the disclosure of the stock price data being transmitted from the ITS to the receiver station at 4:30 PM each weekday (*see* 1987 Spec. P. 449, ll. 13-26; and 1981 Spec., Col. 19, 35-37), while the WSW program is received from the ITS at the receiver station at 8:30 PM on Friday (*see* 1987 Spec. P. 451, ll. 6-7; and 1981 Spec., Col. 19, 45-46).

The forgoing discussion of written description support for claim 56 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 56 as raised in Example 70 of the FOA.

#### **10. Independent Claim 57**

Applicants propose to amend claim 57 to set forth a method of enabling a network to output a multimedia presentation. Claim 57 is similar to claim 26. Claim 57 is directed to the receipt and subsequent transmission of information from a transmitter station to a receiver station in order to allow the receiver station to identify a first medium and a second medium based on processing the two media, and output a multimedia presentation based on the identification of the media in much the same manner as the multimedia presentation described in claim 26. The network includes a receiver station adapted to receive a plurality of media from different sources, process at least two of the plurality of media, identify content of a first and a second of the processed media, and to output the multimedia presentation based on the identification. In the claimed method one of the processed media and an instruction are received at a transmitter station. The received medium is transmitted to the receiver station in response to the instruction.

Written description support for the steps of receiving and transmitting in claim 57 are found in the disclosure of the operations of an intermediate transmitter station with the WSW example. The operation of the transmitter station is similar to claim 43. The 1987 specification supports these limitations in the discussion of the signal processing apparatus as used to automate the operations of intermediate transmission stations that receive and retransmit programming. *See* 1987 Spec., P. 324 *et seq.*, P. 427 *et seq.*, and specifically P. 429, ll. 26-33. The 1981 specification similarly supports the recited steps by the disclosure of a facility receiving transmissions which contains signal processing apparatus that can be used to automate the operation of an intermediate transmission point. *See* 1981 Spec., beginning at Col. 10 l. 14. Claim 57 as proposed sets forth receiving an instruction and transmitting a medium in response to the instruction. The 1987 specification at pages 327-28, and pages 430-435, discloses that at the intermediate transmission station a computer uses received messages to determine what specific program unit has been received and when and on what channels the station should transmit the programming of each received program unit. The 1981 specification likewise disclosed in column 11 that the intermediate station can determine, based on signals in the incoming programming, when and on what channel or channels the programming should be transmitted. Accordingly, both specification disclose transmitting in response to a received instruction.

Claim 57 as proposed sets forth transmission to a receiver station that is adapted to receive a plurality of media in order to output the multimedia presentation, process at least two of the plurality of media in order to output the multimedia presentation, identify content of a first and content of a second of the at least two of the plurality of media based on processing the at least two of the plurality of media and output the multimedia presentation based on identifying the content of the first and content of the second of the at least two of the plurality of media. These functions are similar to the steps recited in claim 26 and thus find support as described above with respect to claim 26.

The forgoing discussion of written description support for claim 57 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 57 as raised in Example 71 of the FOA.

**a. Dependent Claim 58**

Applicants propose to amend claim 58 to recite wherein said receiver station identifies said content of said first of said at least two of said plurality of media by processing a first identifier and identifies said content of said second of said at least two of said plurality of media by processing a second identifier and said method further comprising the step of transmitting a first one of said first identifier and said second identifier.

Identifying said content of said first of said at least two of said plurality of media by processing a transmitted first identifier is supported by the disclosure of the stock price data in the 1987 specification at page 449 lines 13-35 and in the 1981 specification at column 19 lines 35-41.

Identifying said content of said second of said at least two of said plurality of media by processing a transmitted second identifier is supported by the disclosure of the program unit identification and program and channel identifiers, respectively, in the 1987 specification at page 436, line 9 to page 437, line 3 and in the 1981 specification at column 19, lines 17-23.

The forgoing discussion of written description support for claim 58 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 58 as raised in Example 72 of the FOA.

**b. Dependent Claim 59**

Applicants propose to amend claim 59 to recite controlling said transmitter station to transmit said first identifier and said second identifier at different times.

Support for this recitation of a transmitter transmitting a first and second identifier to a receiver station is found in both specifications' disclosure of the ITS facility transmitting programming to a signal processor. *See* 1987 Spec., P. 337, ll. 1-8, 1981 Spec., ll. 45-47. The specifications further disclose that the ITS transmits programming transmissions such as the WSW program with embedded signals (first identifiers, *see* 1987 Spec., P. 250, ll. 13-22; P. 429, ll. 25-33; and 1981 Spec., Col. 10, ll. 24-27; Col. 19, 14-23) and stock price data (the second identifiers, *see* 1987 Spec., P. 449, ll. 13-35; and 1981 Spec., Col. 19, 35-41; Col. 18, ll. 46-56). Both specifications further support the step of controlling the transmitter station to transmit the first and second identifiers at different times. In the specifications it is disclosed that a controller/computer, 73, has means for communicating control information with matrix switch to instruct matrix switch to configure its switches to transfer programming transmissions to output leading to modulator 87. *See* 1987 Spec., P. 328, ll. 14-16; P. 328, l. 31 - P. 329, l. 1; and 1981 Spec., Col. 11, ll. 44-46; Col. 11, ll. 54-57. The recitation that the transmitter station transmits the first and second identifiers at different times is supported by the disclosure of the stock price data being received from the ITS at the receiver station at 4:30 PM each weekday (*see* 1987 Spec. P. 449, ll. 13-26; and 1981 Spec., Col. 19, 35-41), while the WSW program is received from the ITS at the receiver station at 8:30 PM on Friday (*see* 1987 Spec. P. 451, ll. 6-7; P. 429, ll. 25-33; and 1981 Spec., Col. 19, ll. 5-29; ll. 45-46; Col. 9, ll. 53-55).

**c. Dependent Claim 60**

Applicants propose to amend claim 60 to recite wherein said receiver station is enabled to respond to a processor instruction based on said first identifier and said second identifier, said method further comprising the step of transmitting said processor instruction from said transmitter station to said receiver station.

Enabling the receiver station based on the program identifier signals to respond to a processor instruction (instruction signal generated at the origination studio and embedded in

the television programming transmission, 1987 specification at page 25 line 34 to page 26 line 2, and 1981 specification at column 19 line 60 to column 20 line 2) is supported in the 1987 specification at page 21 lines 20-24 and the 1981 specification at column 19 lines 42-44, "preprogrammed to ... respond in a predetermined fashion to instructions signals embedded in the ... programming transmission."

The forgoing discussion of written description support for claim 60 and the identification of support from both specifications in the support charts attached as Appendix C of this Response, fully address the Examiner's concerns with the specification support for claim 60 as raised in Example 74 of the FOA.

### **III. RESPONSE TO PRELIMINARY MATTERS**

#### **A. Introduction**

The Final Office Action (FOA) dated September 4, 2001 has been reviewed carefully and the foregoing amendments made in response thereto.

Claims 2-18, 20-30, 33-49, 51 & 53-60 are amended;

claim 52 is unchanged; and

claims 19, 31-32, 50 & 61-65 are cancelled.

Claims 2-18, 20-30, 33-49 & 51-60 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

#### **B. Request to Withdraw Finality of Instant Office Action**

Applicants respectfully request that the finality of the instant action be withdrawn. On January 13, 2000, the PTO mailed a Non-Final Office Action in the instant application. Applicants formally notified the PTO that the January 2000 Office Action failed to address the supplemental amendment filed by applicants on March 8, 1999 responsive to a Non-Final Office Action mailed on June 29, 1998. On June 29, 2000, the PTO mailed an interview summary stating that the January 2000 Office Action was

withdrawn and that a new Action on the merits was forthcoming. Applicants respectfully contest the finality of the instant action since the previously withdrawn Office Action was a Non-Final Action and the Office had failed to consider applicants' supplemental amendment. Applicants believe that the issuance of a Final Action under these circumstance is in error, and request that the finality of the instant action be withdrawn.

### **C. Response to Administrative Requirement**

Paragraph 86 of the FOA incorporates by reference the "Administrative Requirement" of the Non-Final Office Action mailed on June 29, 1998. Applicants refer to their response to the Non-Final Office Action filed on December 29, 1998 and to section B, pP. 9-17, entitled, "Response to Requirement Imposed Upon applicants to Resolve Alleged Conflicts Between applicants' Applications," attached hereto as Appendix D. Additionally, applicants refer the Office to applicants' matter no. 05634.0261, PTO Serial No. 08/470,571, and the Petition to the Commissioner under 37 C.F.R. § 1.181 filed March 7, 2000, 2000 requesting that the Administrative Requirement be withdrawn for reasons cited therein.

### **D. Response to Miscellaneous Issues Raised in Final Office Action**

In section VII of the FOA ("Evidence of a Shell Game?") the Examiner makes several assertions related to applicants' allegedly improper conduct in connection with the prosecution of this application. For example, the Examiner asserts that applicants have amended claims without "formally notifying the Office/examiners when claims/issues have been considered elsewhere in the record." FOA section VII (P. 91). Applicants maintain that they have complied with their duties under Rule 56 and that they have informed the examiners of all related pending applications. Further, applicants have made considerable effort to assist the many examiners in the related cases with the efficient prosecution of applicants' pending cases. In making his argument the Examiner

misinterprets a statement made by applicants in their “Petition to the Commissioner under 37 C.F.R. § 1.181” to have the Administrative Requirement (“AR”) lifted in the instant application. Contrary to the Examiner’s assertion, applicants did not express an intent to present conflicting claims within different applications in order to obtain different interpretations from others. Instead, applicants simply pointed out that the AR requiring applicants to narrow their claims improperly forces applicants to decide on a definitive interpretation of their claims before the Examiners charged with Examining the claims have interpreted the pending claims. It is the Examiner’s responsibility, not applicants’, to make a determination as to whether the claims submitted by applicants conflict.

The Examiner alleges that in response to a rejection, applicants deleted “completed” terminology in one application (Application Serial No. 08/471,024 (“‘024 application”)) and then reintroduced the “completed” terminology in another application (Application Serial No. 08/470,571) when claims were added in connection with applicants’ agreement to consolidate certain of their pending applications. Applicants do not understand the Examiner’s comments on this point. Applicants did not delete the term “completed” for any reason relating to patentability in connection with the ‘024 application. Indeed, the Examiner made no rejection based on the presence or absence of the term “completed” in the claims of the ‘024 application. There is no reason why applicants would not be entitled to pursue claims that include the term “completed” in one application and claims that do not included the term “completed” in another application.

The Examiner further alleges that applicants have attempted to “misdirect” the focus of the section 112-1 issues related to the 1981 disclosure. The Examiner’s allegations on this issue are without merit. First, applicants note that they have, in fact, identified citations to the 1987 specification that support the existing claims. *See* applicants’ August 13, 1997 Response, P. 12-13. Second, the Examiner is incorrect in his implication that there is only one “proper” specification at issue in this application. As

applicants claim priority to their 1981 application, under 35 U.S.C. § 120, the 1981 specification is entirely relevant. Further, contrary to the Examiner's assertion, applicants are confident that they can demonstrate all requisite support under § 112, first paragraph, in their 1987 application. To this end, applicants have submitted a detailed chart identifying all such support in both the 1981 and the 1987 specifications. *See* Appendix C. Finally, applicants maintain that the Examiner's preoccupation with applicants' allegedly impossible task of demonstrating support in the 1987 specification is misplaced because all of the teachings, details and disclosures from the 1981 specification, are for all practical purposes, also contained in the 1987 specification.

The Examiner also raises several allegations related to alleged inconsistent positions advanced by applicants in connection with the Campbell reference (U.S. Patent No. 4,536,791). The Examiner's characterization relates to alleged events surrounding the prosecution of application Serial Nos. 08/441,577 ("the '577 application"), 08/446,431 ("the '431 application") and 08/484,858 ("the '858 application"). Contrary to the Examiner's position, applicants have not taken inconsistent positions regarding the effect or interpretation of the Campbell reference. The principal flaw in the Examiner's argument is that applicants did not amend the '431 application to avoid the Campbell reference. The claims in the '431 case were amended, but the amendments did not change the scope of the claims to avoid the Campbell reference. The Examiner cannot substantiate his claim that applicant's amended the claims in their February 1998 Response in the "431 case to avoid Campbell. Applicants have steadfastly maintained throughout all of their interviews with the PTO and submissions to the PTO that Campbell does not teach "simultaneous or sequential presentation." The Examiner's quote in the FOA (at P.95) that applicants' amended claim 13 "to avoid the prior art' (Campbell et al.) 'for reasons of patentability'" is incorrect. In the February 1998 Response, applicants traversed the Examiner's rejection of claim 13, specifically arguing that Campbell is silent on "at least one subscriber datum for at least one of simultaneous

presentation and sequential presentation ....” Accordingly, applicants were under no duty to inform the Examiner in the ‘577 or ‘858 applications of applicants’ position with respect to Campbell in the ‘431 case because applicants’ position was consistent in both cases.

Applicants further disagree with the Examiner’s description of the events surrounding the interview of June 15, 1999. Numerous interviews were conducted during the Spring and Summer of 1999, in which the teachings of Campbell were thoroughly discussed. Applicants were then, are now, and have always been of the view that Campbell does not teach or suggest the claimed subject matter of application Serial No. 08/470,571, or any of applicants’ related applications.

For the foregoing reasons, applicants maintain that the Examiner’s arguments in Section VII of the FOA are without merit and that they have not engaged in any improper conduct or neglected any of their duties owed to the PTO in connection with the instant application or any related applications.

#### **IV. RESPONSE TO SUPPORT AND PRIORITY ISSUES**

##### **A. Response to Rejections under 35 U.S.C. § 112**

###### **1. Rejections under 35 U.S.C. § 112, First Paragraph**

###### **a. Written Description**

###### **(1) Summary of the Law**

The test for compliance with the written description requirement uniformly applied by the Federal Circuit is “whether the disclosure of the application relied upon reasonably conveys to the artisan that the inventor had possession at the time of the later claimed subject matter.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991).

The Examiner's statement of the test, to the effect that a person of ordinary skill in the art must be able to "immediately discern" the claim from the disclosure, has some limited textual support in the Federal Circuit's case law. The Federal Circuit has used the term "immediately discernable" to identify the specific and narrow test for the written description requirement as applied to a specific claim limitation.<sup>2</sup> See *Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("Put another way, one skilled in the art, reading the original disclosure, must immediately discern the limitation at issue in the claims."). When the cases are read in context, no substantive difference exists between the "reasonably conveying" and "immediately discerning" tests. See *Waldemar Link, GmbH & Co. v. Osteonics Corp.*, 32 F.3d 556, 558-559 (Fed. Cir. 1994) ("The fact finder must determine if one skilled in the art, reading the original specification, would immediately discern the limitation at issue in the parent . . . In other words, does the 'disclosure of the application relied upon reasonably convey[s] to the artisan that the inventor had possession at that time of the later claimed subject matter.' quoting *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 865 (Fed. Cir. 1993)).

Thus, while the Examiner's articulation of the written description test may have textual basis in the case law, his application of the test to the instant application is unsupported by the law. In applying the "immediately discernible" test to a claim limitation, the artisan must discern the claimed subject matter from the relied upon portion of the disclosure. Accordingly, it turns the "immediately discernible" test on its head to say that because one skilled in the art upon first reading a lengthy disclosure must take time to locate support in various places, he has not demonstrated that the inventor

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<sup>2</sup> In cases in which the Court has applied the immediately discernible test, the focus of the inquiry has been on a particular claim limitation. See, e.g., *Purdue Pharma*, 230 F.3d 1320; *Waldemar Link, GmbH & Co. v. Osteonics Corp.*, 32 F.3d 556. When the inquiry focuses, instead, on the entire claimed invention, the Court describes the test as requiring the disclosure to "reasonable convey" possession of the claimed invention. See, e.g., *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562 (Fed. Cir. 1991); *Kennecott Corp. v. Kyocera Int'l*, 835 F.2d 1419, 1421 (Fed. Cir. 1987).

had possession of the claim. The proper application of the test has the artisan look at the relied upon support and determine if the claim limitation at issue can be “immediately discerned” from that portion of the disclosure. There is no case that supports the Examiner’s application of the immediately discernible test, in which he appears to require one skilled in the art to discern the invention from applicants’ entire disclosure in a certain time period. Contrary to the Examiner’s implication, the “immediately discernible” standard does not impose a specific temporal limitation on the artisan to “immediately” discern the invention from the entire disclosure. Instead, what is stressed in the case law is that the disclosure as a whole “reasonably convey” possession of the invention without reference to any other guidance besides the disclosure. So long as appropriate guidance is found in the disclosure, it is of no moment if the artisan spends even a considerable amount of time to locate it.

It is well settled that *ipsis verba* or *in haec verba* support is not required to satisfy the § 112 written description requirement. *See Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995) (“In order to determine whether a prior application meets the ‘written description’ requirement with respect to later-filed claims, the prior application need not describe the claimed subject matter in exactly the same terms used in the claims; it must simply indicate to persons skilled in the art that as of the earlier date the applicant had invented what is now claimed.”). Again, the crucial factor in satisfying the written description requirement is understanding whether the inventor had possession of the invention at the time the specification was written. Accordingly, exact or precise matching of terminology in the claims with the terminology in the disclosure is not required. “The adequate written description requirement . . . serves to ensure that the inventor had possession, as of the filing date of the application relied upon, of the subject matter later claimed by him; how the specification accomplishes this is not material.” *In re Alton*, 76 F.3d 1168, 1172 (Fed. Cir. 1996). Further, “even if every nuance of the claims is not explicitly described,” the requirement is met so long as one skilled in the art

“would have understood the inventor to have been in possession of the invention at the time of filing.” *In re Alton*, 76 F.3d at 1175; *see also, Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562 (Fed. Cir. 1991) (“Precisely how close the description must come to comply with § 112 must be left to case-by-case development.” (quoting *In re Smith*, 458 F.2d 1389, 1395 (C.C.P.A. 1972)).

A disclosure may also implicitly include certain inherent features or properties. In *Kennecott CorP. v. Kyocera Int'l, Inc.*, 835 F.2d 1419 (Fed. Cir. 1987), the court discussed the “inherency” argument while addressing compliance with the written description requirement. The court cited cases for the analogous proposition that words describing a function which is inherent in the claimed invention could be added to the specification of a continuation application without introducing new matter:

By disclosing in a patent application a device that inherently performs a function, operates according to a theory, or has an advantage, a patent applicant necessarily discloses that function, theory, or advantage even though he says nothing concerning it.

*Kennecott*, 835 F.2d at 1422 (quoting *In re Reynolds*, 433 F.2d 384 (C.C.P.A. 1971)). The court further noted in *Kennecott* that the standard applicable to prove inherency to support a limitation in an interference count, that the inherent property or feature is “the necessary and only reasonable construction to be given the disclosure by one skilled in the art,” was “consistent with that of the other cases on the issue of compliance with section 112, first paragraph.” *Id.* at 1423.

In the FOA, the Examiner fails to acknowledge the principles set forth in *Kennecott* and *Alton* and the fact that the claims may be supported by portions of the disclosure that do not explicitly describe “every nuance” of the claim.

(2) **The Examiner Has Not Met His Burden Of Proof For His Unsupported Rejection Of All Pending Claims Under § 112-1**

In Section X, the Examiner's rejects claims 2-65 "under 35 U.S.C. 112, first paragraph, as containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed, had possession of the claimed invention." FOA, ¶26, P. 107. The Examiner states that this broad rejection is maintained for "the reasons which were addressed in 'SECTION III.'" The Examiner then proceeds to list in Section X, 78 examples of "112-1 problems."

Setting aside for the moment the few specific arguments and reasons advanced by the Examiner that allegedly support rejections based on § 112-1, applicants maintain that the Examiner's blanket rejection of all pending claims under § 112-1 fails to meet his burden to sustain such a rejection. *In re Alton*, 76 F.3d 1168, 1172 (Fed. Cir. 1996), discusses the burden of proof applicable to the written description requirement. The Examiner has the initial burden of presenting a *prima facie* case of unpatentability by:

[P]resenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims. . . . [T]he burden placed on the examiner varies, depending on what the applicant claims. If the applicant claims embodiments of the invention that are completely outside the scope of the specification, then the examiner or Board need only establish this fact to make out a *prima facie* case. If, on the other hand, the specification contains a description of the claimed invention, albeit not *in ipsius verbis* (in the identical words), then the examiner or Board, in order to meet the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient. Once the examiner or Board carries the burden . . . of coming forward with evidence shifts to the applicant . . . to show that the invention is adequately described to one skilled in the art.

*In re Alton*, 76 F.3d at 1175.

Accordingly, the Examiner must “provide reasons why one of ordinary skill in the art would not consider the description sufficient.” *Id.* The Examiner has simply failed to meet this burden for each and every pending claim.

Instead, the Examiner relies upon a very few claim limitations for which he has at least attempted to supply reasons and arguments to explain why one of ordinary skill in the art would not consider the description sufficient. Applicants address and rebut these few specific rejections in the following section; but even if such reasons were meritorious, they are insufficient to support a blanket rejection of each and every pending claim. The FOA cannot, for example, support a § 112, first paragraph, rejection of claims 3, 10, 36, 38, 39, 40, 41, and 42 because nowhere in the FOA does the Examiner specifically address these claims with any arguments related to § 112, first paragraph, whatsoever. The Examiner “must provide *reasons* why one of ordinary skill in the art would not consider the description sufficient”; the general, unsupported rejection of all pending claims fails to satisfy his burden. *Id.* (emphasis added).

The vast majority of the specific § 112-1 “problems” that the Examiner identifies in Examples 1-78<sup>3</sup> do not provide any basis or reasons to support the Examiner’s opinion that certain claim recitations are not supported under § 112, first paragraph. In Examples 3-78, the Examiner simply states that “it is not clear” where applicants’ originally filed disclosure provides § 112-1 support for certain claim limitations.<sup>4</sup> There is no analysis, discussion or reasons given to support any of the Examiner’s conclusions. Example 9 is representative of Examples 3-78:

#### Example #9

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<sup>3</sup> Applicants note that there are actually 80 Examples because the Examiner has labeled two different Examples “Example 67” and two different Examples “Example 78.” Applicants will refer to these as Examples 67A, 67B, 78A and 78B.

<sup>4</sup> Applicants note that Example 22 is not an argument directed to a specific claim. Example 22 simply states that “as will be exemplified in the following ‘examples’ which follow, all of claims 20-65 require support clarification . . . similar to that which is needed for claims 2-19 . . . “FOA, P. 119.

In the context of the steps of claim 10, with respect to the recitations of claim 11, it is not clear where applicants' originally filed instant disclosure described the part of the recited "second portion of said program" that included "audio". Clarification is needed.

The Examiner's statement that "it is not clear" where the specification describes a given claim limitation or simply that "clarification is needed" are not "reasons" why applicants have failed to comply with § 112. Accordingly, because the "problems" identified in Examples 3-78 do not provide any reasons to support the Examiner's assertion that a particular claim limitation is not supported under § 112, first paragraph, the Examiner has failed to meet his burden for a rejection under § 112. Notwithstanding the objection to Examples 3-78, applicants note that they have demonstrated in Appendix C of this Response precisely where support exists in both specifications for every claim limitation referred to in Examples 1-78 that still exists in applicants' amended claims. While applicants assert that each and every claim limitation that the Examiner addressed in Examples 1-78 finds sufficient written description support in both specifications, applicants, in the instant Response, have not specifically identified precise support for those claim limitations that no longer appear in the amended claims. In fact, many of the specific claim recitations complained of by the Examiner in the Examples no longer appear in applicants' claims as they have been proposed to be amended. Accordingly, due to the proposed claim amendments, the issues raised by Examiner in Examples 3-21, 23-27, 36-38, 43-46, 52-53, 57-65, 68-69, 73, and 75-78B are moot.

Finally, the general discussion of issues related to the § 112-1 written description requirement in Section III of the FOA does not provide the requisite reasons needed to support a rejection of all of the pending claims. Applicants note that nowhere in Section III does the Examiner reference *any* of applicants' pending claims in connection with the arguments advanced in that section. Generic arguments and allegations that are not tied to specific claims can not constitute sufficient reasons that are required to support a proper rejection under § 112.

(3) **Responses to Miscellaneous § 112-1 Problems That Allegedly Support Examiner's Blanket Rejection of All Pending Claims**

Throughout Sections I-IX of the FOA, the Examiner makes numerous unsupported allegations and assertions in connection with his argument that none of the claims satisfy the written description requirement of § 112-1. These miscellaneous “allegations” fail to satisfy the Examiner’s burden to present “reasons why one of ordinary skill in the art would not consider the description sufficient” in order to sustain a § 112-1 rejection. *In re Alton*, 76 F.3d at 1175. First, none of these allegations are linked to a specific claim pending in the instant application. Second, with one possible exception (i.e., the Examiner’s position related to the alleged use of different terminology), the Examiner fails to provide any reasons or examples that arguably support the allegations. Third, positions taken frequently by the Examiner are contrary to the law. Finally, certain allegations, even if true, do not constitute a proper basis to support a § 112-1 rejection. For these reasons, the allegations discussed below simply do not support the Examiner’s rejection of all pending claims under § 112-1.

(a) **The Examiner’s Assertion that Claims Cannot be Immediately Discerned from the Disclosure**

Countless times in sections I-IX of the FOA the Examiner asserts that one skilled in the art cannot *immediately discern* the limitations in the claims from the 1987 disclosure. The assertion that applicants fail the immediately discernable test, no matter how many times and ways the assertion is made, is simply an improper and insupportable basis for rejecting the claims.

However, in order to advance prosecution of this application, applicants have provided in the support charts contained in Appendix C of this Response and the narrative discussion of written description support for each claim in Section II above,

using detailed specification citations, how each and every claim meets the requirements of 35 U.S.C. § 112. Accordingly, any “rejection” based on this assertion should be withdrawn.

**(b) The Examiner’s Assertion  
of Improper Use of the 1981  
Disclosure**

The Examiner also asserts, without support, that applicants have continuously and improperly used the 1981 disclosure, rather than the 1987 version, to show § 112 support for the pending claims. This statement is simply incorrect.

Applicants have identified specific support in the 1987 specification when the Examiner has requested such support. For example, in response to the Examiner’s request in the February 13, 1997 Office Action that applicants demonstrate support for certain limitations in the 1987 specification, applicants specifically identified the requisite support in the 1987 specification. *See* applicants’ August 13, 1997 Response, P. 12-13. While applicants have relied primarily on the 1981 disclosure to demonstrate § 112-1 support to establish entitlement to a 1981 priority date, applicants understand that, as a threshold matter, written description support must be found in the 1987 disclosure as originally filed and standing alone to satisfy § 112-1. Accordingly, in addition to the narrative discussion of § 112 support in Section II above, applicants have supplied, in Appendix C to this Response, a detailed chart that specifically identifies § 112, first paragraph, support in the 1987 specification for each and every pending claim limitation.

**(c) The Examiner’s Assertion  
of Improper Use of  
Amended Claims**

The Examiner asserts that applicants are somehow using the knowledge and teachings of the amended claims filed in the instant case as a basis/teaching to satisfy the written description requirement. *See* FOA, §III, P. 28. This “rejection” is not understood

by applicants. The support charts contained in Appendix C, and the explanations provided in Section II above, cite to the 1987 and 1981 specifications — not the claims. Whatever the legal merit of the argument, the Examiner once again fails to provide even a single example to support the allegation, yet again failing to satisfy his burden to support a substantive § 112-1 rejection. This allegation is incorrect and inconsistent with the record. Accordingly, any “rejection” based on this allegation should be withdrawn.

**(d) The Examiner’s Assertion  
that the Use of Different  
Words Makes Locating  
Support a Monumental  
Task**

The Examiner asserts that reading and absorbing the 1987 disclosure is “unpleasant and monumental task” that “pales in comparison with the monumental task of trying to decipher the limitations of applicants’ currently pending amended claims based on such a difficult disclosure.” *See FOA, ¶7, P. 53.* Even if true, this is not a proper basis to support a § 112-1 rejection. The law is clear that an examiner’s “difficulty” in reviewing an application is not a proper basis for a § 112-1 rejection. *See Alton, 76 F.3d 1168, 1175* (unless the claims are completely outside the scope of the specification, an examiner must present specific reasons why the specification does not support the claims in order to satisfy the burden of proof required to sustain a rejection under § 112).

The Examiner alleges that the selection and use of “drastically” different words is a “fatal flaw” preventing one from immediately discerning the claim limitations from the 1987 disclosure is incorrect. *FOA, ¶7, P. 53.* Contrary to the Examiner’s position, the law specifically allows an applicant the leeway to use different words to describe the same invention. *See Kennecott, 835 F.2d at 1422.* The Examiner may not be excused from performing his task: he must review the words an applicant uses in a putative claim, apply their fair meaning and determine whether such words appropriately describe the

invention even if the applicants' written description uses different words. Applicants should not be penalized for providing thorough and detailed disclosures. The public policy reasons underlying the requirement of the disclosure of a thorough description of the invention clearly favors the filing of a detailed specification.

(e) **The Examiner's Assertion  
that Support Must be  
Identified in a Single  
Embodiment/Example**

Similarly, the Examiner is mistaken when he states that applicants are "limited to now claiming only those 'methods' which were actually described" in each specific example or embodiment in the 1987 disclosure, rather being able to claim operations, methods, or processes that find support in a "mixture of steps from different" operations, methods, or processes described in the disclosure. FOA, P. 30-31. An applicant may claim subject matter that finds support in different portions of the disclosure, so long as one skilled in the art would recognize the claimed invention or limitation from the disclosure *as a whole*. See, e.g., *Kolmes v. World Fibers Corp.*, 107 F.3d 1534, 1539 (Fed. Cir. 1997) (concluding that the description requirement was met in part because "defendant has not shown that the specification as a whole would have failed to convey to one skilled in the art the use of the claimed [invention]"); *In re Wright*, 866 F.2d 422 (Fed. Cir. 1989) ("The specification as originally filed must convey clearly to those skilled in the art the information that the applicant has invented the specific subject matter later claimed. When the original specification accomplishes that, regardless of how it accomplishes it, the essential goal of the description requirement is realized. In deciding the issue, the specification as a whole must be considered." (citing *In re Ruschig*, 379 F.2d 990, 996 (C.C.P.A. 1967)).

While applicants maintain that there is no legal requirement that a claim be supported in a single embodiment, applicants note that written description support for

many of applicants' pending claims is found in the same embodiment — either the WSW example or the Cooking Show example. *See also* Section IV.B of this Response discussing this issue in relation to the Examiner's "common subject matter" requirement.

**(f) The Examiner's Assertion of Improper Reliance on Twisted/Inconsistent Definitions of Terminology**

The Examiner argues that applicants are relying on "twisted" and contradictory meanings for terms present in the claims and the disclosures in order to justify written description support. FOA, P. 28-29. The Examiner further maintains that it is unclear what is being claimed because applicants' alleged use of art-specific terminology in the pending amended claims forces applicants to assign meanings of certain terms that are repugnant to their conventional meanings. FOA, P. 28-29. In support, the Examiner discusses specific terminology from the claims and disclosures, although no claims are rejected or referenced by claim number. While the Examiner's arguments ostensibly focus on "terminology" involving a discussion or comparison of the 1981 and 1987 disclosures, it is unclear whether the Examiner is supporting rejections under § 112-1 or denying applicants' claim of priority under § 120. Because of this lack of clarity and for the sake of consistency, applicants respond to these "terminology" issues in Section IV.C of this Response addressing the Examiner's position that applicants are not entitled to priority under § 120.

**(4) Responses to the Specific § 112-1 Problems Identified by Examiner in the Examples**

Although the Examiner does not make formal § 112-1 rejections with respect to each example found in Section X, the Examiner does identify specific § 112-1 "problems" in Examples 1 and 2. At best, the Examiner's identification of these

problems can be construed as an attempt to make formal § 112-1 rejections of the particular claim at issue.

In Example 1, the Examiner notes that applicants' disclosure described a complex transmission system/apparatus comprising numerous circuit components and variations thereof that were described independently as being capable of providing a wide range of functions. FOA § X, P. 107. The Examiner argues that applicants are not entitled to "mix and match functions/steps of the originally described components into combinations/sequences which were not described in the originally filed instant disclosure in the required 'immediately discernable' fashion." FOA § X, P. 108. The Examiner's argument is nearly identical to the argument advanced in Section III (at P. 30) of the FOA. As already addressed in Section IV.A of this Response, contrary to the Examiner's argument, there is no *per se* prohibition preventing an applicant from claiming subject matter that finds support in different portions of the disclosure, so long as one skilled in the art would recognize the claimed invention or limitation from the disclosure *as a whole*. See, e.g., *Kolmes v. World Fibers Corp.*, 107 F.3d 1534, 1539; *In re Wright*, 866 F.2d 422. Accordingly, applicants submit that all of the claimed methods and steps in the instant application are immediately discernable from the 1981 and 1987 disclosures, as demonstrated in Appendix C and in Section II above.

In Example 2, the Examiner questions the basis for support of the recitation of a "plurality of signals including at least two transmissions of different kinds" in claims 2-19. In the instant Response, applicants propose to amend claim 2 and cancel claim 19. As a result of the proposed amendments and cancellations, the recitation of a "plurality of signals including at least two transmissions of different kinds" no longer appears in any of the proposed amended claims and the Examiner's arguments in Example 2 directed to this recitation are moot.

In numerous Examples, the Examiner asserts that applicants' 1987 disclosure does not support recitations of "at least one" or "at least two" of certain elements. See

Examples 23-24, 30, 33-34, 37, 39, 40-43, 49, 51-52, 54-61, 63-66, 69, 71-74, 78A-78B.

Contrary to the Examiner's assertion, one skilled in the art would clearly recognize from the 1987 disclosure that applicants had possession of the claimed invention. There is nothing in the disclosure that teaches away from the use of the single or dual elements discussed in this Example. There is no suggestion, for example, that the disclosed invention would work with two signals, three signals, 2 million signals or any number of signals, *but not* with only one signal or only two signals. *See e.g.*, Example 33. The Examiner's assertion that applicants are not entitled to claim "at least one" or "at least two" of the recited elements is tantamount to requiring applicants to recite every element disclosed in the specification in the claim. This view, of course, finds no support under the controlling authority. Accordingly, applicants are entitled to claim "at least one" or "at least two" of the elements recited in the pending claims.

The Examiner, in the italicized comments regarding alternative language at the end of many of the Examples, again appears to require applicants to recite in the claims every element of a disclosed embodiment. *See Examples 4, 26, 32, 44, 46, 61, 62, 64, 67A, 67B, 70, 72 and 75.* In the italicized comments, the Examiner asserts that alternative claimed steps or elements cannot be supported by a single disclosed embodiment that includes both claimed steps or elements. In other words, the Examiner asserts that the disclosure of both does not support a claim including either. There is no legal support for the Examiner's position. Applicants have disclosed, in signal embodiments, multiple elements that can accomplish the same function. There is no reason that applicants cannot now claim an invention that includes one of the elements to accomplish the function. For instance, the Example 67A addresses claim 52, which is directed to communication of a second signal at a transmitter apparatus. The cable headend disclosed in the specification includes both signal generators that add signals to the programming and multiple receivers for receiving signals. The disclosure of these multiple elements in a single cable headend fully supports the claimed transmitter

apparatus including one of a signal generator and second receiver for communicating a second signal. Similarly, with regard to Example 67B, the channel combining system & multiplexer shown at 92 in Fig. 6B support the recitation of one of a combiner and a multiplexer for combining signal recited in claim 53.

Applicants note that the alternative limitations discussed in Examples 4, 26, 32, 44, 46, 61, 62, 64, 70, 72 and 75 have been deleted from the proposed claims (or the claim has been cancelled), thus rendering the Examiner's comments moot. However, applicants maintain that multiple elements that can perform a function within a single disclosed embodiment do support the recitation in the claims of individual elements for performing the function.

**b. Responses to Examiner's Rejections  
Based on § 112 for Lack of Enablement  
(All Claims Directed to the  
Processing/Distribution of Digital  
Television)**

Those of claims 2-65 which are directed to the processing/distribution of digital television programming stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make or use the invention. FOA at 156. All of the Examiner's rejections based on claims containing "processing/distribution of digital television programming" are rendered moot due to applicants' amendments.

None of applicants' amended claims contain the recitation of "processing" or "distribution" of "digital television programming." Applicants note that claims 11 and 12 do contain the recitation of a "a digital data channel," as supported in the specification. *See* Section II above regarding summaries and support for amended claims and the specification support tables provided in Appendix C of this Response. Applicants further note that the term "digital" appears only in claims 11 and 12. Accordingly, as none of applicants' proposed amended claims contain a recitation of the "processing" or "distribution" of

“digital television programming,” applicants respectfully request that the rejection of claims 2-65 based on lack of enablement under § 112 be withdrawn.

**2. Rejections Under 35 U.S.C. §112, Second Paragraph**

**a. Blanket Rejections for Which Examiner Has Not Met His Burden of Proof (All Pending Claims Are Rejected Under § 112-2 for Indefiniteness)**

In Section VI, the Examiner, in the parenthetical/title following Section VI, states that “All of applicants’ Pending Amended Claims Fall Under § 112-2 Too.” FOA, § VI, P. 75. This statement appears to be a formal rejection of all of applicants’ pending claims, although the Examiner does not provide specific arguments directed to specific claims to support this blanket rejection. In the following section of the Response, applicants address the specific arguments that the Examiner does raise in Section VI. Additionally, in Section IX, the Examiner asserts that all of the currently pending amended claims are indefinite for the reasons addressed in Section V of his FOA. In making this assertion, which does not appear to be a formal rejection of the pending claims under § 112-2, the Examiner fails to provide specific reasoning or examples to support his assertion. In making the aforementioned assertions and statements that could arguably be considered formal rejections, the Examiner has not met his burden to demonstrate that *all* of the pending claims are indefinite under § 112-2.

**b. Specific Arguments Regarding § 112-2**

The Examiner raises several issues in support of his rejections under § 112-2. Almost all of these issues are the nearly identical arguments that were raised in support of the Examiners rejections under § 112-1. In their response to the Examiner’s § 112-2 rejections, applicants will address any new issues and arguments that have not already

been addressed in this Response, and simply refer back to sections of this Response concerning § 112-1 for issues that have already been addressed.

The Examiner argues in Section VI of the FOA that applicants' pending claims reciting the term "programming" are indefinite because applicants employ different definitions of the term in the 1981 and 1987 disclosures. FOA, § VI ¶15, P. 75-77.

Applicants submit (for the reasons explained in Section IV.C.4.d of this Response) that the definitions and use of the term "programming" are consistent in the 1981 and 1987 disclosures. Accordingly, the Examiner's argument that claims incorporating this term are indefinite is without merit.

The Examiner also argues in Section VI that all claims including the term "digital (or digitized) television (or TV) program (or programming or signal or signals or content)" will be rejected under § 112-2 when the claimed terminology is used to refer to SPAM message packets because the term "digital/digitized" is used in a manner that is repugnant to its ordinary meaning. FOA at 81. The Examiner asserts that the term "digital TV signal" would not have been understood by those skilled in the art to mean insertion/ancillary signals like SPAM message packets whose purpose is to enhance rather than carry content. FOA, at 79. Applicants' maintain that *none* of the pending claims in this application recite the term "digital television" in any of the combinations identified by the Examiner in Section VI of the FOA. Accordingly, the Examiner's intent to make any rejection of occurrences of this terminology is moot. As previously indicated, applicants note that only amended claims 11 and 12 recite the term "digital," in the recitation of "a digital data channel." *See supra*. If the Examiner makes arguments or rejections based on language or terminology that is actually present in applicants' claims, applicants will respond accordingly.

The Examiner also discusses in Section VI that applicants' use of the terms "software module" and "instruction module" in a related application. FOA, § VI ¶19, P. 86-87. Applicants have continuously attempted to use these terms in a consistent and

clear manner as required in the context of specific claims. The Examiner's assertion that the terms "software module," "instruction module" and "data module" must be synonymous is incorrect. The Examiner further requests applicants to indicate whether these terms have the same meaning. While it is true that the terms "software module" and "instruction module" may have the same scope in the pending claims, the fact that the term "data module" supports both terms does not make all three terms synonymous. A term that provides written description support for a recited term does necessarily mean that the supporting term is synonymous with the recited terms. Finally, applicants note that none of the terms "software module," "instruction module" or "data module" appears in any of the pending amended claims.

Paragraph 20 of Section VI of the FOA discusses applicants' use of the term "receiver station." The term "receiver station" refers to a station that receives various types of transmitted information. While all receiver stations will receive transmitted information, other characteristics and functions of receiver stations may vary. The Examiner fails to interpret the term "receiver station" within the context of a specific claim or make any rejection based on his discussion of "receiver stations." Applicants believe that their use of the term "receiver station" is definite in all of the pending amended claims. However, as the Examiner has not applied the arguments advanced in paragraph 20 to limit the scope of the term "receiver station" with respect to a specific claim, applicants reserve their right to address these arguments if and when they are raised in relation to a specific claim.

In Section IX of the FOA the Examiner rejects claims 2-19, 27, 30, 53-56, 58-60 and 65 under § 112, second paragraph, as being indefinite. While the Examiner appears to reject each of the aforementioned claims, applicants note that the Examiner only discusses and provides reasons to support his rejections for claims 2, 27, 30, 53, 58, and 65. Regarding claim 2, the Examiner argues that the term "transmissions of different kinds" is unclear as the term appears in the recitation of "a plurality of signals including

at least two transmissions of different kinds.” As an initial matter applicants note that pursuant to the proposed claim amendments the term “transmissions of different kinds” no longer appears in any of applicants’ amended claims, and accordingly, the Examiner’s rejection is moot. Notwithstanding applicants’ proposed claim amendments, applicants maintain that the term “transmissions of different kinds” was used in a consistent and definite manner to distinctly point out and definitely claim the subject matter that applicants regard as their invention. The Examiner questions whether TV programs, embedded SPAM signals, and information received at the receiver station over the phone line are each transmissions of “a different kind”? Applicants assert that each of these examples do constitute “transmissions of different kinds” and that this assertion is consistent with the portion of the specification cited by the Examiner, namely that “[i]f a unit like the microcomputer can receive transmissions from more than one source or of more than one kind-television, radio, or other -it will have sufficient apparatus to monitor every channel and kind of transmission it can receive.” FOA, P. 105.

Regarding claim 27, the Examiner asserts that the recitations of “said information contained in said first signal [and in said second signal]” lack antecedent basis and are indefinite. As these recitations no longer appear in proposed amended claim 27, the Examiner’s rejection is moot.

Regarding claim 30, the Examiner asserts that the recitation of “at least one of said sequences of processor instructions” lacks antecedent basis and is indefinite. As these recitations no longer appear in proposed amended claim 30, the Examiner’s rejection is moot.

Similarly, arguments directed to recitations in claims 53, 58 and 65 for which the Examiner asserts there is no antecedent basis, have all been rendered moot by the proposed claim amendments to claims 53 and 58 and the cancellation of claim 65.

### 3. Conclusion

Applicants respectfully submit that claims 2-65 of this subject application as pending at the time of the FOA and in their proposed amended form particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1566, 30 USPQ2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants have proposed various amendments to the claims to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

Applicants believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. § 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide specific embodiments in support of the pending claims by way of example only. The claims must be read as broad as is reasonable in light of the specification, and applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

### B. Applicants' Response with Respect to Claim of Priority Under 35 U.S.C. § 120

The Examiner devotes much of the FOA to various unsupported theories as to why applicants are not entitled to a 1981 priority date based on applicants' 1981 priority application. Despite the Examiner's extensive commentary, observations and assertions

on the subject, the issue of whether an applicant is entitled to priority under §120 is straightforward.

The test applied by the Federal Circuit to determine whether an applicant may obtain the benefit of an earlier filing date from a related application under §120 is simple: an applicant is entitled to priority under § 120 for any claim if the disclosures in both applications each satisfy the requirements set forth in § 112 for that claim. *See, e.g., Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997) (“In order to gain the benefit of the filing date of an earlier application under 35 U.S.C. §120, each application in the chain leading back to the earlier application must comply with the written description requirements of 35 U.S.C. §112; Each application in the chain must describe the claimed features.”); *Studiengesellschaft Kohble v. Shell Oil Co.*, 112 F.3d 1561, 1564 (Fed. Cir. 1997) (“In other words, a claim complies with 35 U.S.C. §120 and acquires an earlier filing date if, and only if, it could have been added to an earlier application without introducing new matter.”); *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1421 (Fed. Cir. 1987) (“The incorporation of the [enablement and written description] requirements of section 112 into section 120 ensures that the inventor had possession of the later-claimed invention on the filing date of the earlier application.”).

Accordingly, the law requires a two part test in which the applicant separately demonstrates §112 support for each application. In the FOA, the Examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of “common subject matter.” The Examiner asserts that for applicants to obtain priority:

- 1) Applicant must first identify exactly where the present 1987 disclosure described in an “immediately discernible” fashion that which is now being claimed in the given pending amended claim; and 2) [t]hen, applicant must identify “common subject matter” in the 1981 disclosure which provided this “same” section 112-1 support for the given claim.

FOA, ¶10-11, P. 63.

The Examiner goes on to emphasize that “claims must be directed to subject matter that is common to both of applicants’ [applications]” and that “[p]riority is not established via allegations of ‘correlated subject matter.’” FOA, P. 64. Later, the Examiner asserts that “applicant must be able to show that the disclosed/claimed subject matter of the present 1987 application represents the same subject matter (i.e., “common” subject matter) which as disclosed/described earlier in his previously filed 1981 parent application.” *Id.* at ¶11, P. 64-65. The Examiner identifies no authority to support his position that the relied upon disclosures must represent the same or common subject matter.<sup>5</sup>

In the present application, because the relevant part of each application must sufficiently support an identical claim or claim limitation, the two bases of support will be similar (and consist of “common subject matter”) as a result. The portions of the two specifications relied upon by applicants to support any given pending claim demonstrate this similarity and the fact that the relied upon support does consist of “common” subject matter. For example, as evidenced from the discussion of support for the pending claims in Section II above, written description support for many pending claims is found in the same embodiment — either the WSW example or the Cooking Show example. The general aspects of these examples/embodiments are found in both specifications, although the 1987 specification describes the basic examples with many enhancements and improvements. Accordingly, applicants maintain that support for the pending claims

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<sup>5</sup> In the FOA the Examiner relies on *Transco Products Inc. v. Performance Contracting, Inc.*, 38 F.3d 551 (Fed. Cir 1994). In *Transco*, the court observed that “an application is entitled to the benefit of the filing date of an earlier application as to common subject matter.” *Id.* at 557. In support of this statement, the court cited four cases from the Court of Custom and Patent Appeals and one decision from the Commissioner of Patents. All five of these authorities recite the same test for compliance under § 120: to obtain the benefit of an earlier filing date, both applications must satisfy the requirements of § 112. None of the authorities suggest that the support relied upon by applicant to satisfy § 112 be “common” or “similar.” *Transco* simply uses the term “common subject matter” to describe subject matter which is sufficiently supported under § 112 by both applications.

exists in the same embodiment.<sup>6</sup> Such support constitutes “common subject matter, even though the “common subject matter” requirement, as applied and imposed by the Examiner, contradicts the case law describing what is required to obtain priority under § 120.

The Examiner’s assertion that because the same phrases from the 1981 specification are not necessarily found in the 1987 specification applicants are prevented from demonstrating “common subject matter” and obtaining a 1981 priority date, distorts the standards for priority under § 120. There is no separate requirement that textual “continuity” between two disclosures be met to establish priority. Rather, the “continuity” described in the case law is established when both disclosures separately satisfy the requirements of § 112 with respect to the later filed claims. Once § 112 support has been shown in both disclosures, there is no additional requirement to demonstrate that the “claims are directed to ‘common subject matter’ for which ‘continuity’ has been maintained.” FOA, ¶16, P. 21-22. Recognizing there to be no obligation to update the best mode in a continuation application “to maintains [sic] continuity between applications,” the Examiner asserts that applicants were required to at least carry forward the “old best mode” from of [sic] his earlier filed application into his originally filed present disclosure. . . [a]pplicant failed to do this and therefor [sic] has not maintained ‘continuity of disclosure.’” FOA at n.27. The Examiner’s assertion is incorrect and unsupported by the law.

Nothing in the case law suggests that the two disclosures be compared to determine if they disclose the invention in a similar manner. In fact, contrary to the position asserted by the Examiner, the case law clearly acknowledges that claims can be supported by disclosures in the earlier and later filed applications in *different ways*:

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<sup>6</sup> As discussed above in section IV.A.1a.(3)(e), applicants note that the law does not require that written description support be identified in the same embodiment in order to comply with §§ 112 and 120. See *Kennecott*, 835 F.2d at 1422; *Kolmes*, 107 F.3d at 1539; *In re Wright*, 866 F.2d at 424.

[T]he earlier and later applications need not use identical words, if the earlier application shows the subject matter that is claimed in the later application, with adequate direction as to how to obtain it. . . . [A]n invention may be described in many different ways and still be the same invention. . . . In *In re Kirchner*, 305 F.2d 897, 904 134 USPQ 324, 330 (C.C.P.A. 1962) the court held that compliance with section 120 does not require that the invention be described in the same way, in both applications. *Id.* In *Kirchner* the court authorized the addition to the specification of descriptive matter concerning the use of compounds without the loss of the parent's application's filing date.

*Kennecott*, 835 F.2d at 1422.

None of the cases addressing satisfaction of the § 120 test suggests that the two disclosures identified to support a claim must or need be compared for similarity in any manner. Instead, what is simply required is that the claim (or claim limitation) be separately satisfied under § 112-1 by both disclosures. The written description test applied to the earlier application does not differ from the test applied to the later application.

In *Edwards*, 568 F.2d 1349 (C.C.P.A. 1978), the court considered a chemical compound that was not described in the earlier application, and stated that the earlier and later applications need not use the identical words, if the earlier application shows the subject matter that is claimed in the later application, with adequate direction as to how to obtain it. Invoking the inherency argument, the court observed that the chemical reactions described in the earlier filing “will inherently produce, as the predominant compound, the [later] claimed compound.” *Edwards*, 568 F.2d at 1352.

An applicant is entitled to priority for a claim that recites a feature that was inherently described in an earlier application and explicitly described in a later filed application. *See Therma-Tru CorP. v. Peachtree Doors Inc.*, 44 F.3d 988, 993 (Fed. Cir 1995) (“the later explicit description of an inherent property does not deprive the product of the benefit of the filing date of the earlier application”); *Litton Systems, Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1439 (Fed. Cir. 1984) (“If matter added through amendment to a C-I-P application is deemed inherent in whatever the original parent

application discloses, however, that matter also is entitled to the filing date of the original, parent application.”), *overruled in part on other grounds by Two Pesos Inc. v. Taco Cabana*, 505 U.S. 763 (1992). Accordingly, claims in a continuation application that are supported by a detailed disclosure in a later-filed application may be entitled to the priority date of a parent application that did not explicitly disclose those details as long as those details are inherent to the parent application.

The case law interpreting § 120 does not require an applicant to demonstrate that the disclosures relied upon under § 112-1 have anything in common besides their ability to separately comply with § 112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner’s focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do to satisfy § 120 is show that each disclosure meets the requirements of § 112-1 for a given claim.

### **C. Response to Examiner’s Denial of Priority to 1981**

As stated, the Examiner raises numerous issues to support his conclusion that none of applicants’ pending claims are entitled to a 1981 priority date under § 120. Applicants note that they have distinguished all of the pending amended claims from every reference applied by the Examiner. Accordingly, applicants maintain that they are not required to demonstrate, and have not needed to rely on, a 1981 priority date in order overcome any of the Examiner’s rejections under § 102 or § 103. Even though in Section IV.B above, applicants have already shown that the Examiner applies an improper test to the priority issue, applicants directly respond to the general and specific issues raised by the Examiner related to priority.

**1. Applicants' Allegedly Improper Reliance on Written Description Support in the 1981 Application**

Applicants have agreed that the 1981 application is not expressly incorporated by reference into the 1987 application. Accordingly, applicants must demonstrate written description support in the 1987 application to satisfy the written description requirement. Applicants have demonstrated precisely that in Section II above and in the support charts attached as Appendix C. The FOA contains numerous charges that applicants improperly have previously directed the Examiner to written description support in the 1981 specification rather than the 1987 specification. These charges are groundless,<sup>7</sup> but even if true, irrelevant. As applicants have always maintained that all of the pending claims are entitled to the 1981 priority date, applicants have simply addressed written description support for both cases concurrently, rather than first showing support in the 1987 case, then showing support in the 1981 case as the Examiner now demands. Unfortunately, the Examiner misconstrued applicants' attempt at easing his burden as an improper, misleading submission.

**2. The Alleged Effects of Applicants' Decision Not to Incorporate by Reference the 1981 Application into the 1987 Application as Originally Filed**

The FOA is replete with the Examiner's observations that the 1981 application was not incorporated into the 1987 application as originally filed and that this has a fatal effect on applicants' ability to establish a 1981 priority date. The Examiner's position on this point has absolutely no support under the controlling authorities. There is no bright line test whereby an applicant loses his right to claim priority to an earlier application if the earlier application is not incorporated verbatim into the later application. As the case

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<sup>7</sup> As shown in section IV.A.1.a.(3)(b) above, applicants in prosecuting this application have identified written description support in the 1987 specification when requested. *See also* applicants' August 13, 1997 Response, P. 12-13.

law makes clear, applicants' decision not to incorporate the 1981 specification *in hac verba* is of no consequence.<sup>8</sup> Accordingly, the Examiner's discussion of whether part of, or all of, the 1981 application made its way into the 1987 application is completely irrelevant to the priority issue. For the same reasons discussed in Section IV.B of this Response (regarding the improper requirement of "common subject matter"), applicants are entitled to priority with respect to each claim for which the requirements of § 112 were met in both disclosures.

### 3. Best Mode

The FOA relies on the following quote from *Transco* to support the argument that no claim in this Application is entitled to priority:

It must be understood that the introduction of a new best mode disclosure would constitute the injection of "new matter" into the application and automatically deprive the applicant of the benefit of the earlier filing date of the parent or original application for any claim whose validity rests on the new best mode disclosure.

*Transco*, 38 F.3d 551, 558 (FOA, § 1, P. 4).

Even assuming that applicants have updated the best mode in the 1987 disclosure, applicants would lose the 1981 priority date only for claims whose support under § 112, first paragraph, rests on the new best mode disclosure. Applicants maintain that none of the pending claims contain limitations or elements that are supported only by the 1987 disclosure. In other words, all of the pending claims are separately and equally supported by both disclosures. Accordingly, it makes no difference if applicants have updated the best mode in the 1987 case and it is of no consequence that the 1981 specification is not explicitly incorporated by reference in the originally filed 1987 application.

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<sup>8</sup> The only legitimate problem that could potentially arise from applicants' decision on this issue is if support for a pending claim does not exist in the 1987 application, but only in the 1981 specification. This is the only scenario in which applicants' decision not to explicitly incorporate the 1981 application into the 1987 application would have any effect whatsoever. But this is not the case for any pending claim.

#### 4. Specific Issues

a. **The Technology Disclosed in the 1981 and 1987 Disclosures Is Sufficiently Similar to Support All of the Currently Pending Claims**

Throughout the FOA the Examiner argues that applicants cannot demonstrate written description support for the pending claims because the disclosures in the 1981 case and the 1987 case are based on “vastly different technology.” FOA, ¶13, P.19.

Later, the Examiner asserts that:

[A]ll limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure; namely, the more “sophisticated” systems/methods of the present 1987 disclosure. These 1987 “sophisticated” systems/methods clearly constitute different subject matter” from the “primitive” systems/methods whose descriptions were left behind in the 1981 parent disclosure. Accordingly the “subject matter” of the 1981 parent does not constitute “common subject matter” with respect to the “subject matter” now being claimed and, therefor, the currently pending amending claims are not entitled to the priority of the 1981 filing date . . . .

FOA, ¶9 P. 60.

This argument is flawed for several reasons. First, as shown below, the technology/systems/methods that are described in the 1981 case are, in fact, very similar to the technology/systems/methods that are described in the 1987 case. Second, as already explained, there is no additional requirement that the subject matter of the 1981 case constitute common subject matter with respect to the subject matter claimed in the 1987 case. The Examiner’s focus on a comparison of similarities between the systems and technology described in the two disclosures is not relevant to whether applicants have complied with the written description requirement of § 112-1 in both applications. Third, the assumption that “all limitations of the currently pending claims are necessarily directed to that which is described [only] in the present 1987 disclosure” is mistaken and wholly unsupported. Finally, and to repeat, applicants are entitled to priority because all of the pending claims are supported separately in both disclosures.

The Examiner misses the mark in his conclusion that the disclosures describe different technology and that all of the pending claims are “necessarily” directed to only to the “sophisticated” technology of the 1987 disclosure. Instead of disclosing different technology/systems/methods (hereinafter “systems”), the 1987 disclosure merely provides additional enhancements and improvements to the same systems that are described in the 1981 application. Both disclosures describe systems in which “instruction signals” are transmitted from a origination/receiving station to a signal processor at a remote user’s receiver station. The 1987 disclosure provides enhancements and improvements regarding the nature and types of instruction signals that are disclosed in the 1981 application.

Applicants could, if they chose, claim in the 1987 case narrow limitations directed to the specific enhancements and improvements that are described in the 1987 case. These would not be entitled to the 1981 priority date. Applicants, however, have not presented claims that recite the details residing only in the 1987 case. Instead, applicants have written claims that are supported by the systems described in both disclosures.

Applicants may seek and are entitled to obtain claims and coverage that may be broader than a specific embodiment disclosed as long as one skilled in the art would understand that the inventor had possession of the subject matter claimed at the time the original disclosure was made. *See Utter v. Hiraga*, 845 F.2d 993, 998 (Fed. Cir 1988) (“A specification may, within the meaning of 35 U.S.C. § 112, first paragraph, contain a written description of a broadly claimed invention without describing all species that claim encompasses”);<sup>9</sup> *In re Rasmussen*, 650 F.2d 1212 (C.C.P.A. 1981).

The pending claims are directed or limited to those aspects of the systems that are commonly described in both disclosures. The Examiner erroneously assumes that just

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<sup>9</sup> Although *Utter v. Hiraga* was decided under the old interference rules which are no longer in effect, the above quoted proposition from *Utter v. Hiraga* is still cited with approval by the Federal Circuit. *See Regents of the Univ. of Cal. v. Eli Lilly & Co.*, 119 F.3d 1559, 1568 (Fed. Cir. 1997).

because there is support in the 1987 disclosure, similar support in the 1981 disclosure can not exist. Applicants' support charts included in Appendix C and the discussion of specification support provided in Section II above, demonstrate that both specifications support all of the pending claims.

**b. The 1981 Disclosure of "Instructions" and "Commands" Supports the Recitation of "Downloading of Computer Software/Programming"**

The Examiner asserts that cueing codes, referred to in the 1981 disclosure as "instructions" or "commands," do not support the downloading of computer software/programming because the 1981 disclosure describes a processor that was preprogrammed and because not every series of instructions or commands constitute computer software/programming. FOA § III, P. 32.

The terms "downloading of computer software," "downloading of programming" or "downloadable processor instructions" did not appear anywhere in the claims as they were pending at the time of the FOA, and none of those terms appears in any of the currently proposed amended claims. Accordingly, as none of the claims contain the relevant terms, Examiner's arguments directed to "downloadable processor instructions" are without merit.

This observation notwithstanding, applicants maintain that "downloadable processor instructions" and "downloading of software" are fully supported in the 1981 and 1987 specifications. In related Applications (for example, Application Serial No. 08/470,571) applicants have provided support for the "downloadable processor instructions" recitation that is essentially the same for the 1981 and 1987 disclosure: "Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the 'Wall Street Week' program transmission" (1981 Spec., Col. 19, ll. 42-44) and "Microcomputer, 205, is preprogrammed to receive said

input of signals at its asynchronous communications adapter and respond in a predetermined fashion to instruction signals embedded in the ‘Wall Street Week’ program transmission.” 1987 Spec., P. 21, ll. 20-24.

The 1981 disclosure, in which instructions or commands are transmitted to a preprogrammed microcomputer, supports the recitation of “downloadable processor instructions.” Further, applicants maintain that the instructions or commands described in the 1981 disclosure would have been understood by one skilled in the art to be a series or collection of data organized to perform a function that could be transmitted and which was capable of being downloaded at some remote location to cause a processor to perform a function.

**c. Consistent Interpretations Are Applied to Claim Limitations to Find Support in the 1981 and 1987 Disclosures**

The Examiner asserts, again with few concrete examples, that applicants have used and assigned different interpretations or definitions to identical terms in a given claim in order to demonstrate written description support in the 1987 and 1981 disclosures. FOA, § II, P. 19-20. Applicants acknowledge that claims, claim limitations, and claim terms cannot be defined or interpreted differently or inconsistently when an applicant demonstrates written description support in two different disclosures. However, applicants have not assigned or used different or conflicting interpretations of claim terms or limitation to show § 112 support.

To exemplify that different definitions have been assigned to claim limitations, the Examiner argues that claim recitations are “contorted in an attempt to craft them to read independently on different teachings from the two disclosures.” It appears that Examiner’s real problem is that applicants have recited claims (and claim limitations) that are of precisely the right breath to be supported by both the 1981 disclosure and the 1987 disclosure. This practice is entirely permissible. *See Utter v. Hiraga*, 845 F.2d 993, 998.

The fact that a claimed invention or limitation may be described in different ways does not preclude the invention or limitation from being properly supported under § 112-1. *See Kennecott*, 835 F.2d at 1422 (“[A]n invention may be described in many different ways and still be the same invention.”). Different descriptions in a disclosure are sufficient to support a claim limitation without being found to interpret or define the claim limitation in different or inconsistent ways.

The Examiner’s discussion in footnote 26 is illustrative. The Examiner asserts that the recited term “downloadable processor instruction” is “contorted” in order to “read independently on different teachings from the two disclosures.” FOA, § II, P. 20. As a threshold matter, applicants note that the terms “downloading of computer software,” “downloading of programming” or “downloadable processor instructions” did not appear anywhere in the claims as they were pending at the time of the FOA, and none of those terms appears in any of the currently proposed amended claims. Accordingly, the Examiner’s arguments on this issue are moot.

Notwithstanding this observation, applicants note that in related applications in which the term “downloadable processor instruction” is used, applicants rely primarily on the nearly identical support from the 1981 and 1987 disclosures to support that term; namely, “microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the ‘Wall Street Week’ program transmission.” *See* 1981 Spec., Col. 19, ll. 42-44; 1987 Spec., P. 21, ll. 20-24. The Examiner criticizes applicants for relying on this support (which allegedly requires “contorting” the definition/interpretation of “downloadable processor instruction”) because “different,” allegedly clear, support appears in the 1987 specification. This “different” support, namely the “program instruction set” described in the 1987 disclosure, is not a different variety of support, it is merely another example of data capable of being downloaded that is transmitted to instruct a processor. An applicant is entitled to claims that may be broader than a single embodiment if the prior art permits. *See Gentry Gallery, Inc. v.*

*Berkline Corp.*, 134 F.3d 1473, 1479 (Fed. Cir. 1998) (“an applicant . . . is generally allowed claims, when the art permits, which cover more than the specific embodiment shown”). Applicants have simply drafted claims that cover the specific embodiment to which the Examiner points, and which are fully supported by the description of the instruction signals which are sent to a microcomputer. There is nothing inconsistent in the way the claim limitation is being interpreted in order to demonstrate compliance with § 112-1 using the support relied upon by applicants, *or* using the support suggested by the Examiner.

**d. Applicants Use One Consistent Definition of “Programming”**

The Examiner finds that applicants have used two different definitions of programming in the 1987 and 1981 applications, and that these allegedly different definitions raise problems under §§ 112-1 and 112-2. *See* FOA, P. 8, 16, 67-68, 75-76. The Examiner asserts that applicants’ 1981 definition of programming is limited to “scheduled radio and television shows,” while applicants’ 1987 definition explicitly defined that term to generically encompass other types of programming from environments outside the radio and television arts.

“Programming” was a defined term in both applications. The 1981 application defined programming as “everything that is transmitted over television or radio intended for communication of entertainment or to instruct or inform.” U.S. Pat. No. 4,694,490, Abstract, lines 4-7. The 1987 application defined programming as “everything that is transmitted electronically to entertain, instruct or inform including television, radio broadcast print, and computer programming as well as combined medium programming.” 1987 Spec., P. 11, ll. 6-10. The language of the two disclosures is not inconsistent. Any inconsistency that can be found arises only because of the Examiner’s overly narrow interpretation of the 1981 application.

The 1981 application does not limit the definition of “programming” to “scheduled radio and television shows.” The definition is expansive, including at least “everything” transmitted by radio or TV that is intended for communication of entertainment or to instruct or inform. The Examiner’s interpretation of the term, which limits the term to content or shows that are seen or heard by the viewer or listener, is not supported by the definition or the discussion of programming elsewhere in the definition. While the term programming clearly is meant to include the television and radio “shows,” the definition is sufficiently broad to encompass additional transmitted information that is a key element of applicants’ invention disclosed in the 1981 application. For example, the term “programming” is used in the 1981 specification to refer to the transmission of shows or content seen by the viewer and embedded data instructions, codes or signals.

The 1981 specification states:

It is the object of this invention to unlock this potential by the development of means and methods which permit programming to communicate with equipment that is external to television and radio receivers, particularly computers and computers peripherals such as printers.

1981 Spec., Col. 1, ll. 36-41.

Thus, applicants’ 1981 specification makes clear that “programming” is not just TV and radio shows — it can also include instructions, codes and signals that communicated to and control, e.g., computers and computer peripherals. These instructions, codes and signals clearly fall within the explicit definition of programming and to find otherwise is to conveniently and purposefully overlook the entire purpose of the invention.

The definition of programming in the 1987 definition does not depart from this definition. The 1987 definition merely lists additional specific examples of things transmitted to entertain, instruct or inform. The 1987 definition includes “television, radio, broadcast print, and computer programming as well as combined medium

programming” as examples of programming. 1987 Spec., P. 11, ll. 6-10. Contrary to the Examiner’s position, the “computer programming” expressly included in the 1987 definition and the “instruction and information signals” implicitly included in the 1981 definition do constitute common subject matter. The instruction and information signals are a series of data instructions transmitted to cause a computer to perform certain functions. Similarly, computer programming is a series of data instructions that can be transmitted to cause a computer to perform certain functions. Again, to find otherwise is to craft opposition to the application, not to give it fair reading.

The Examiner’s attempts to characterize the 1981 and 1987 definitions of “programming” as different are unconvincing. Accordingly, the use of the term “programming” in the pending claims finds consistent and sufficient support in both the 1981 and 1987 applications.

## V. RESPONSE TO PRIOR ART REJECTIONS

### A. Legal Requirements for Rejections Based on Prior Art

#### 1. Legal Requirements for Anticipation

For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Foundation v. Genetech, Inc.*, 927 F.2d 1565, 1991 WL 523489 (Fed. Cir. 1991). Absence from a cited reference of any element of a claim negates anticipation of that claim by the reference. *Kloster Speedsteel AB v Crucible, Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986).

Anticipation can occur when a claimed limitation is “inherent” in the relevant reference. *Standard Havens Products, Inc. v. Gemcor Industries, Inc.*, 953 F.2d 1360, 21 USPQ2d 1276 (Fed. Cir. 1991). However, “[t]o serve as an anticipation when the

reference is silent about the asserted inherent characteristic, such gap in the reference may be filled . . . by evidence [that] must make clear that the missing descriptive matter is necessarily present in the thing described in the reference.” *Continental Can Company USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ2d 1746 (Fed. Cir. 1991). In other words, “[i]nherency may not be established by probabilities or possibilities . . . [and] . . . [t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency.” *Scaltech Inc. v. Retec/Tetra, L.L.C.*, 178 F.3d 1378, 51 USPQ2d 1055 (Fed. Cir. 1999).

## **2. Legal Requirements for Obviousness Based Rejections**

To establish a *prima facie* case of obviousness under § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all of the claim recitations. MPEP 706.02(j). Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on applicants’ disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In order to support a § 103 rejection based on the modification of a single reference, the Examiner must provide specific evidence to show why one of ordinary skill would be motivated to modify the reference in such a way to incorporate all of the claimed elements. See *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-1317 Fed. Cir. 2000) (“[e]ven when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.”) (emphasis added). Broad conclusory statements concerning motivation to modify, standing alone, are not sufficient to support an obviousness rejection. See *In re*

*Freed*, 425 F.2d 785, 787, 165 USPQ 570, 571-72 (C.C.P.A. 1970) (an obviousness rejection must be based on facts, “cold hard facts”); *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“[b]road, conclusory statements standing alone are not ‘evidence’”). Accordingly, a statement that a modification would be an “obvious design choice,” without factual support, is insufficient as a matter of law. *In re Dembiczkak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). Finally, as the absence of a suggestion to modify a reference is dispositive in an obviousness determination, a rejection which fails to provide specific evidence as to why one of ordinary skill would be motivated to modify the relevant reference is insupportable, as a matter of law. See *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 42 USPQ2d 1378 (Fed. Cir. 1997).

In order to support a § 103 rejection based on a combination of references, the Examiner must provide a sufficient motivation for making the relevant combinations. See MPEP §§ 2142 and 2143.01; see also *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998) (“When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references”). It is well-settled that an examiner can “satisfy [the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness] only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the reference.” *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). As with rejections based on the modification of a single reference, “broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence [of a motivation to combine]” and thus do not support rejections based on combining references. *In re Dembiczkak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999), abrogated on other grounds by *In re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000). Without objective evidence of a motivation to combine, the obviousness

rejection is the “essence of hindsight” reconstruction, the very “syndrome” that the requirement for such evidence is designed to combat, and without which the obvious rejection is insufficient as a matter of law. *Id.* at 1617-1618.

**3. Legal Requirements for Allowability of dependent claims depending on an allowed independent claim**

In the remarks set forth below, applicants explain why each and every independent claim, as amended, is patentably distinguishable over the cited prior art. It is well-established that if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

**B. Rejections rendered moot by cancellation of certain claims**

As reflected in Appendix A, applicants have proposed canceling certain claims. The cancellation of these claims is not made for any reason substantially related to patentability, but is offered in a good faith attempt to advance prosecution of the instant application on the merits

The following claims have been canceled: claims 19, 31-32, 50 & 61-65. Accordingly, the rejections of those claims contained in the FOA is rendered moot. Specifically, the rejection of dependent claim 19 contained in paragraphs 51 and 67 of the FOA is rendered moot. The rejection of dependent claim 31 contained in paragraphs 65, 70 and 82 is rendered moot. The rejection of dependent claim 32 contained in paragraphs 44, 53 and 81 is rendered moot. The rejection of dependent claim 50 contained in paragraphs 60 and 85 is rendered moot. The rejection of independent claim 61 contained in paragraphs 76 and 77 is rendered moot. The rejection of dependent claim 62 contained in paragraphs 76 and 78 is rendered moot. The rejection of dependent claims 63-64

contained in paragraph 78 is rendered moot. The rejection of dependent claim 65 contained in paragraph 79 is rendered moot.

### **C. Response to Specific Prior Art Rejections**

#### **1. Rejections over Standard Television Receivers/Sets as Exemplified by Lunn**

##### **a. Summary of Lunn**

Lunn is U.S. Patent No. 4,383,273. Lunn describes a large scale integrated circuit television subsystem comprising: a television receiver including an IF amplifier, video detecting and processing circuits, and horizontal and vertical processing circuits for producing sync pulses respectively.

##### **b. Summary of the Application of Lunn**

Lunn is relied upon by the Examiner as an example of a receiver for standard TV signals. In particular, the Examiner notes that a standard television signal includes both an audio signal and a video signal.

##### **c. Deficiencies in the Application of Lunn**

Lunn issued as a U.S. patent on May 10, 1983. Each of the claims rejected over Lunn claim priority to parent application serial no. 317,510 filed November 3, 1981, as discussed above in Section IV.C. As Lunn was not patented or printed more than one year prior to November 3, 1981, Lunn is not available as prior art under 35 U.S.C.

§ 102(b). The rejections over Lunn under 35 U.S.C. § 102(b) should be withdrawn for at least this reason. Notwithstanding, Lunn fails to teach or suggest all the features of any of applicants proposed claims for the following reasons.

In assessing the rejection based on standard television receivers/sets and Lunn, applicants' understanding is that the Examiner is not actually combining standard television receivers/sets and Lunn. Rather, the Examiner offers Lunn only as

exemplifying conventional television receivers/sets for purposes of this § 102 rejection.

However, if a proper combination of the references is provided by the Examiner to support an obviousness-based rejection, applicants reserve the right to point out the lack of motivation for the combination and failure to satisfy other requirements for combining references.

**d. Independent Claim 2**

Paragraph 30 rejects claims 2 under 35 U.S.C. § 102(b) as being anticipated by standard television receivers/sets as exemplified by Lunn. Neither Lunn nor any other standard TV receiver in the prior art teaches each and every element of the invention defined by proposed claim 2. In particular, standard TV receivers including Lunn do not teach a receiver that receives two media wherein the receiver **stores a first medium and determines content of a second** medium.

The Examiner relies on the video and audio signal components of a standard television signal to show a multimedia presentation. However, proposed claim 2 is amended to set forth that the receiver stores a first medium. Standard television receivers in the prior art, including the receiver set forth by Lunn, do not store the video or audio signal. To the contrary, both the audio and video is output as it is received. The applied prior art fails to teach storing a first medium as set forth in proposed claim 2.

Additionally, proposed claim 2 is amended to set forth a step of determining content of a second medium. Standard television receivers in the prior art, including Lunn, do not determine the content of a medium. In applicants method, functions are based determining the content of media that are broadcast. For example, in one embodiment described in the specification, the receiver determines that the “Wall Street Week” program is received. Standard television receivers in the prior art, do not make such a determination. The video and audio components of the television program are not coordinated based on determining the content of either the video or audio signal.

Standard television receivers output each program on the signal to which the receiver is tuned without regard to the content of the program. Accordingly, the applied art fails to teach determining content of a second medium as set forth in proposed claim 2.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §102(b) rejection of independent claim 2 based on Lunn be withdrawn. Claims 2-18 depending from claim 2 are patentable in view of Lunn for the reasons discussed above.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium includes some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Lunn.

Standard television receivers as exemplified by Lunn, simply display television programs. Standard television receiver do not teach or suggest a presentation coordinated at the receiver station where one medium explains the significance of another portion of the multimedia presentation. Accordingly, Lunn does not teach or suggest the additional feature recited by dependent claim 7.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in the 81 specification is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the audience member’s portfolio performed in comparison to the overall market as the audience member’s graphic (first medium) is presented.

Standard television receivers as exemplified by Lunn merely disclose the output of standard television programming. They include no teaching that the television audio explains the significance of a portion of a multimedia presentation that coordinate at the receiver station with the audio. Accordingly, this reference does not disclose or suggest the invention of dependent claim 8.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. As discussed above for claim 2, standard television receiver do not store the television programming. Neither the audio or video components of the programming are stored. Accordingly, standard television receivers do support steps of storing both first and second media as set forth by claim 17. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not contemplated by Lunn.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Standard television receivers do not suggest storing any medium whatsoever and do not suggest determining the content of any medium. This art, thus, does not suggest storing any medium based on determining its content as recited by claim 18.

e. **Independent Claim 37**

Paragraph 30 rejects claim 30 under 35 U.S.C. § 102(b) as being anticipated by standard television receivers/sets as exemplified by Lunn. Neither Lunn nor any other standard television receiver in the prior art teaches each and every element of the invention defined by proposed claim 37. In particular, standard television receivers, including Lunn, do not teach a receiver including a storage device for **storing a first medium** and a processor that coordinates a multimedia presentation based on **determining content of a second medium.**

Proposed claim 37 is amended to include “a storage device for storing a first medium.” As discussed above with respect to claim 2, standard television receivers in the prior art, including the receiver set forth by Lunn, do not include a storage device for storing a medium of a multimedia presentation. The applied art fails to teach a storage device.

Additionally, proposed claim 37 is amended to set forth that the “processor coordinates a presentation . . . based on determining content of [a] second medium.” As discussed above with respect to claim 2, standard television receivers in the prior art, including Lunn, do not coordinate the presentation of the audio and video component of a television program based on determining the content of either the video or audio signals. Accordingly, the applied art does not teach a processor that coordinates based on determining content of a second medium.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 102(b) of independent claim 37 based on Lunn be withdrawn. Claims 38-42 depending from claim 37 are patentable in view of standard television receives as exemplified by Lunn for the reasons discussed above.

(1) **Dependent Claim 41**

Proposed claim 41 sets forth a storage device for storing the second medium. As claim 37 set forth a device for storing the first medium, both media are stored by the

claimed apparatus. Standard television receiver do not store the television programming. Neither the audio or video components of the programming are stored. Accordingly, standard television receivers do not support elements for storing both first and second media as set forth by claim 41. There is no suggestion of second device for storing a second medium in the applied references.

**f. Independent Claim 51.**

Paragraph 31 rejects claim 51 under 35 U.S.C. § 102(b) as being anticipated by standard television receivers/sets as exemplified by Lunn for the same reasons as were set forth for claims 2 and 37. Neither Lunn nor any other standard television receiver in the prior art teaches each and every element of the invention defined by proposed claim 51. In particular, standard television receivers, including Lunn, do not teach a signal that causes a receiver station to **determine content of a medium**.

Proposed claim 51 is amended to set forth that the receiver receives and the transmitter transmits a signal that is adapted to cause the receiver station to coordinate a presentation based on determining the content of a medium. As discussed above with respect to claim 2, standard television receivers in the prior art, including Lunn, do not coordinate the presentation of the audio and video component of a television program based on determining the content of either the video or audio signals. Accordingly, no transmitter apparatus, for enabling standard television receivers, receive or transmit a signal that enables the receivers to determine any content. The applied art does not teach receiver for receiving or a transmitter for transmitting a signal adapted to cause a receiver station to determine content of a medium as set forth in proposed claim 51.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 102(b) of independent claim 37 based on Lunn be withdrawn. Claims 52-56 depending from claim 51 are patentable in view of standard television receives as exemplified by Lunn for the reasons discussed above.

**(1) Dependent Claim 55**

Proposed claim 51 is amend to set forth that the receiver processes a portion of the first medium based on a second identifier. As discussed above, with respect to claim 51, standard television receivers do not determine the content of any medium by processing any identifiers. Accordingly, there is no suggestion to process any portion of a medium based on a **second** identifier as set forth in claim 55.

**2. Rejections based on any of Hutt, Bart, Oono, and Betts**

**a. Summary of Hutt**

Hutt is U.S. Patent No. 3,961,137. Hutt describes the transmission of digital teletext data in the vertical blanking interval of a television transmission. Hutt includes a description of a receiver station that receives the teletext/data signal and, based on a viewer's control of a display selector, can display only the video picture of the television signal, the picture and superimposed text, or the data only on a black screen with no video. Hutt notes that the system can be arranged to transmit subtitling captions. However, Hutt relies on the use of the vertical blanking interval for the transmission of data. Hutt lacks any suggestion that any text is displayed based on a determination of the content of the television program.

**b. Summary of Bart**

Bart is U.S. Patent No. 4,218,698. Bart describes a system for displaying text graphic images on video. The Bart system displays teletext provided in the vertical blanking interval of a television signal. The Bart teletext system includes a level control network that adjusts the graphics display intensity level in accordance with the intensity level of representative video signals when in a mixed video plus graphics mode. The Bart system preserves a desired contrast between the displayed video and graphics information. Bart discloses displaying text with the video in which it is embedded for

transmission. Bart lacks any suggestion that the teletext is displayed based on the content of the television program.

**c. Summary of Oono**

Oono is Japanese Published Application No. 55-028691 listing Kenzou Oono et al. as inventor. References to Oono refer to the English translation by FLS, Inc. provided by the Office and dated March 1997. Oono describes a system in which software or picture data is included with a video signal and transmitted to a home. Based on the type of data received, a switch is set to either output the images from the data alone or to superimpose images on the incoming video. In one mode of operation, the data is software. When executing the software the switch is set to output images alone. In another mode of operation, Oono describes superimposing received graphic images that are stored in video RAM on the video of the incoming television signal. The selection of the setting of the switch is based on the data received, not on the television program received. Oono describes no relationship between any superimposed graphic image and the video of the incoming television signal.

**d. Summary of Betts**

Betts is a British patent application published as number 1 556 366. Betts describes a combined television/data display system at a receiver station. Betts discloses storing text data received during the line scan periods of television signals. Betts includes a control box that among other functions controls the production of a "box" for display, in an overlay manner, of data superimposed on the normal television picture. However, Betts includes no suggestion that the text displayed in an overlay manner is based on the content of the television picture.

**e. Summary of the Application of any of Hutt, Bart, Oono and Betts**

Applicants' understanding is that the Examiner applies these four cumulative references in the alternative. If the Examiner offers these references as a proper combination, applicants reserve the right to challenge the basis for combining these references for lack of motivation for the combination and failure to comply with the other requirements to combine references under § 103. In this instance, the Examiner applies each reference to show text data that is displayed simultaneously with the video of a television transmission. The output television video with the character images overlaid thereon is asserted to comprise a multimedia presentation. The Examiner maintains that the limitations of claims 2 and 37 read on any TV receiver that displays data characters simultaneously with television video.

**f. Independent Claim 2**

Paragraph 32 rejects claims 2 under 35 U.S.C. § 102(b) as being anticipated by any of Hutt, Bart, Oono and Betts. These applied references showing graphic images overlaid on incoming video from a television signal do not teach each and every element of the invention defined by proposed claim 2. In particular, the applied art does not teach a receiver that receives two media wherein the receiver stores a first medium, **determines content of a second medium, and coordinates** presentation of a portion of the first medium with the second medium based on the determination.

Applicants proposed to amend claim 2 to set forth a step of storing a first medium and a step of determining content of a second medium. The Examiner relies upon teletext type data and television video from the applied references to show two media. There is no suggestion in the applied art to either store television video or to determine the content of the television video. Accordingly, the television video disclosed in the applied references does not correspond to either the first or the second medium set forth in proposed claim 2. In an embodiment of applicants' method, the content of television

programming is determined. Based on the determination, particular graphic information is overlaid on the television video. This ability to coordinate particular graphic information with television video based on a determination of what television program is received is not contemplated by the applied art. Accordingly, neither Hutt, Bart, Oono, nor Betts teach determining content of a second medium as set forth in proposed claim 2.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §102(b) rejection of independent claim 2 based on Hutt, Bart, Oono, or Betts be withdrawn. Claims 2-18 depending from claim 2 are patentable in view of the applied references for the reasons discussed above.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium includes some explanation or evaluation of the meaning or importance of the content of the first medium. There is no suggestion in the prior art that the television video in any manner refers to the graphic image that may be output with the video. Accordingly, the television video does not explain the significance of any image that is added at the receiver station. Accordingly, the applied art does not teach or suggest the additional feature recited by dependent claim 7.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in the 81 specification is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the audience member’s portfolio performed in comparison to the overall market as the audience member’s graphic (first medium) is presented. There is no suggestion in the

prior art that the television audio in any manner refers to the graphic image that may be output with the television video. Accordingly, the television audio does not explain the significance of any image that is added to the television video at the receiver station. Accordingly, these references do not disclose or suggest the invention of dependent claim 8.

**(3) Dependent Claim 17**

Proposed claim 17 is amended to provide for storing the second medium. Claim 17 depends from claim 2, which sets forth storing the first medium. As discussed above, teletext type data and television video are relied upon by the Examiner to show two media. However, the television receivers of the applied art do not teach storing both media. The television video is not stored in any of the television receivers cited by the Examiner. The claimed method of outputting a multimedia presentation from two stored media is not contemplated by the applied art.

**(4) Dependent Claim 18**

Proposed claim 18 depends from claim 17 and further provides that the second medium is stored based on the step of determining. In terms of the embodiment discussed in claim 2, the television video is stored based on determining its content. As the television receivers of the applied art merely output television video as it is received, the content of the video is not determined and the video is not stored. There is no teaching in the applied art of storing the second medium based of determining its content.

**g. Independent Claim 20**

Paragraph 55 rejects claim 20 under 35 U.S.C. § 103(a) as being unpatentable over any of Hutt, Bart, Oono and Betts. These applied references showing graphic images overlaid on incoming video from a television signal do not show or suggest each element of the invention defined by proposed claim 20. In particular, the applied art does not show or suggest **identifying content of a first medium based on an identifier** and

controlling the receiver station to respond to a **processor instruction** based on the identification. Also, the applied art lacks any suggestion of **responding to the processor instruction to coordinate presentation of the first and second media based on determining content of the second medium.**

Applicants propose to amend claim 20 to set forth identifying content of a first medium of a multimedia presentation and responding to processor instruction to coordinate presentation of the first and second media of the presentation. According to this invention, a particular television program may be identified with an identifier received at the receiver. Based on the identity of the particular television program a processor instruction then causes additional matter, such as a graphic overlay, to be output with the television program to form a multimedia presentation. The applied art at best shows teletext or other images output with the television video. There is no suggestion of any identifier used to identify the television programming. Even if the teletext is considered to be the first medium that is identified based on an identifier, the applied art includes no additional step of responding to a separately received processor instruction to coordinate any teletext output with television output. Accordingly, the applied references fail to show or suggest identifying content of a first medium based on an identifier as set forth in proposed claim 20.

Additionally, proposed claim 20 is amended to set forth that the step of responding to the processor instruction is based on identifying content of the second medium. In other words, the graphic overlay is coordinated with the television program based on identification of its content. Accordingly, the content of both media is identified. As discussed above, the television receivers of the applied art do not identify the content of the television program. Thus, the applied art does not suggest receiver functions that are based on identifying both media of a multimedia presentation.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 20 based on Hutt, Bart, Oono, or Betts be

withdrawn. Claims 21-23 depending from claim 20 are patentable in view of the applied references for the reasons discussed above.

**(1) Dependent Claim 22**

Claim 21 depends upon independent claim 20. Applicants propose to amend claim 21 to set forth that the step of controlling of claim 20 includes originating the second medium. According to the claimed invention the overlay outputted with the television program is originated based on identifying the television programming. For example a graphic of the viewer's stock performance is created at the receiver based on identifying the "Wall Street Week" program. The teletext or other images overlaid on television video in the applied art is not originated based on identifying any television program.

**h. Independent Claim 37**

Paragraph 32 rejects claims 37 under 35 U.S.C. § 102(b) as being anticipated by any of Hutt, Bart, Oono and Betts. These applied references showing graphic images overlaid on incoming video from a television signal do not teach each and every element of the invention defined by proposed claim 37. In particular, the applied art does not teach a processor that **coordinates** a multimedia presentation of a first portion of a multimedia presentation with a second medium based on **determining content of the second medium** and a storage device that stores a first medium to provide the first portion of the multimedia presentation.

Applicants propose to amend claim 37 to set forth a storage device for storing a first medium and a processor that coordinates a presentation based on determining content of a second medium. The Examiner relies upon teletext type data and television video from the applied references to show two media. There is no suggestion in the applied art to either store television video or to determine the content of the television video. Accordingly, the television video disclosed in the applied references does not

correspond to either the first or the second medium recited in proposed claim 37. In an embodiment of applicants' method, a processor determines the content of television programming and outputs particular graphic information that is overlaid on the television video. The applied art does not suggest a processor with this ability to coordinate particular graphic information with television video based on a determination of what television program is received. The teletext generators in the applied art at best merely output stored teletext graphics over whatever video is in the signal to which the receiver is tuned. There is no suggestion that the teletext is coordinated with the television video based on determining the content of the video. Accordingly, neither Hutt, Bart, Oono, nor Betts teach a processor that coordinates a presentation based on determining the content of the second medium as set forth in proposed claim 37.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §102(b) rejection of independent claim 37 based on Hutt, Bart, Oono, or Betts be withdrawn. Claims 38-42 depending from claim 37 are patentable in view of standard television receives as exemplified by the applied references for the reasons discussed above.

**(1) Dependent Claim 41**

In paragraph 52 of the FOA, claim 40 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Oono or Betts in view of Barrett. Barrett is U.S. Patent No. 4,205,343 and is applied to show encrypting and decrypting teletext broadcasts. Barrett teaches no relevant further advances over the teaching of Oono and Betts. The decryptor has been deleted from proposed claim 40. Proposed claim 41 is amended to depend from claim 40 and sets forth a storage device for storing the second medium. As claim 41 sets forth a device for storing the first medium, both media are stored. However, at best Oono and Betts only teach storing teletext type images. The applied references do not teach a

device for storing the television programming. Thus, there is no suggestion of second device for storing a second medium in the applied references.

**i. Independent Claim 51**

Paragraph 33 rejects claim 51 under 35 U.S.C. § 102(b) as being anticipated any of Hutt, Bart, Oono or Betts as was set forth for claims 2 and 37. These applied references showing graphic images overlaid on incoming video from a television signal do not teach each and every element of the invention defined by proposed claim 51. In particular, the applied art does not teach a signal that causes a receiver station to **determine content of a medium.**

As an initial matter, the applied references each limit their descriptions to television receivers with graphic image processing capabilities. Claim 51 sets forth a transmitter apparatus. The Examiner asserts that the television receivers of the applied art inherently received the television programming for display from some type of transmitter apparatus. Although the existence of transmitter apparatus is implied, there is no teaching that such a transmitter apparatus must necessarily include all the elements set forth in claim 51. For instance, such a transmitter apparatus need not have a receiver for receiving signals that have effect at the television receivers of the ultimate users.

More importantly, there is no teaching of a signal having the effect of the signal recited in proposed claim 51 that the receiver receives and the transmitter transmits. Proposed claim 51 is amended to set forth that the signal is adapted to cause the receiver station to determine content of a second medium and to coordinate presentation of a first portion of a multimedia presentation with the second medium based on determining the content. No signal is found in the applied reference that is adapted to cause the television receiver to determine content of the television signal. As discussed above with respect to claims 2 and 37, the television signals of the applied art do not teach determining content of the television signal as set forth in the claims. Accordingly there can be no signal that

causes the television receivers of the prior art to perform this function. The applied art does not teach a receiver for receiving or a transmitter for transmitting a signal adapted to cause a receiver station to determine content of a medium as set forth in proposed claim 51.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 102(b) of independent claim 51 based on Hutt, Bart, Oono or Betts be withdrawn. Claims 52-56 depending from claim 51 are patentable in view of standard television receives as exemplified by these references for the reasons discussed above.

**(1) Dependent Claim 55**

Proposed claim 55 is amend to set forth that the receiver station processes a portion of the first medium based on a second identifier. The receiver station determines that content of the second medium by processing a first identifier. Thus, processing of both media is based on an identifier. From the applied art, the television programming and the text overlaid thereon are relied upon to show a multimedia presentation. There is no suggestion in the applied art to process any portion of the television programming based on an identifier. Accordingly, there is no suggestion to process any portion of the first medium based on a second identifier as set forth in claim 55.

**3. Rejections based on Oono, Betts, or Barrett**

**a. Summary of Barrett**

Barrett is U.S. Patent No. 4,205,343. Barrett describes a television system for broadcasting digitally coded information superimposed in the field blanking interval of television programs. In this system the digitally coded information carrying signals are enciphered prior to transmission in accordance with a predetermined key. Barrett is relied upon to show means for encrypting and decrypting teletext broadcasts.

As in the previous rejection, applicants' understanding is that the Examiner applies Oono and Betts in the alternative, not as a combination. If a proper combination

of Oono and Betts is offered, however, applicants reserve the right to point out the absence of motivation for the combination and failure to satisfy other requirements of a combination under § 103. Regarding the other applied reference, Barrett, applicants would also like to point out that the claims have been amended to remove recitations related to encrypting. Therefore, applicants believe that the Barrett reference is no longer relevant to the claims, as amended.

**b. Independent Claim 29**

Paragraph 53 rejects claim 29 under 35 U.S.C. § 103(a) as being unpatentable over Oono or Betts in view of Barrett. These applied references showing graphic images overlaid on incoming video from a television signal do not teach each and every element of the invention defined by proposed claim 29. In particular, the applied art does not teach a method of outputting a multimedia presentation including processing a **control signal** that programs a processor to **create a series of discrete video images, identifying content of a first medium**, causing an image of the series to be output based on the identification, wherein the multimedia presentation includes the first medium and the output video image.

The method of claim 29 outputs a multimedia presentation including a video image from a series of discrete video images with another media. This method provides, for example, for a series of overlays to be created that relate to a television program at a receiver station. The receiver station is then controlled to output a selected overlay with the television video as a multimedia presentation tailored to the specific receiver station. The applied prior art at best teaches teletext data or other picture data received in the vertical blanking interval of a television signal. Neither teletext data nor other picture data in the applied art include a control signal that programs a processor to create a series of discrete video images as set forth in proposed claim 29. The pictures or teletext images output cannot be considered to be a series of discrete video images as set forth in

claim 29, because teletext images and pictures are not discrete images that are displayed based on identifying content of the television video with which they are displayed. In fact, the applied art discloses no identification of the television programming whatsoever. Accordingly, the applied art does not teach causing a video image of the created series to be output based on identifying content of a first medium as set forth in claim 29.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 29 over Oono and Betts in view of Barrett be withdrawn for at least the above reasons. Claim 30 depending from claim 29 is patentable in view of the applied references for the reasons discussed above.

#### **4. Rejections based on Hirashima, JP 0049084**

##### **a. Summary of Hirashima, JP 0049084**

Hirashima, to the extent that this fairly confused translation can be understood, generally discloses a multi-signal TV receiver capable of receiving “heterophonic,” as well as conventional “monophonic,” TV signals. The transmission includes (a) a conventional TV signal with video and main audio (“first language audio”), (b) a “sub-voice” channel for carrying the sub-audio (“second language audio”), (c) a teletext character signal for translating the sub-audio into the first language, and (d) a “pilot carrier” for indicating the presence of the sub-audio. When the pilot carrier is detected, the second language sub-audio and the teletext translation are output.

##### **b. Summary of Application of Hirashima, JP 0049084**

Paragraphs 39-41 reject claims 2, 8-11, 20, 22-24 & 26 under 35 U.S.C. § 102(b) as being unpatentable over Hirashima, JP 0049084. In paragraph 39, the Examiner asserts that Hirashima discloses a receiver system for outputting a multimedia presentation comprising the teletext character data, the television video, and the sub-audio when an “instruction” in the sub-audio channel is detected. In other words, the

Examiner asserts that the pilot tone comprises an instruction that causes Hirashima's receiver station to output a multimedia presentation of the teletext character graphics, the television video, and the second language audio. In paragraph 40, the Examiner further applies Hirashima as teaching that the pilot tone causes the synchronized output or simultaneous output of the teletext character graphics video and the corresponding sub-audio.

**c. Deficiencies in the Application of Hirashima, JP 0049084**

As an initial matter, applicants traverse the rejections based on Hirashima because the rejections are rendered moot by the amendment to each of the independent claims rejected based on Hirashima. Applicants further traverse the rejection on the basis that the Examiner has conspicuously failed to relate the claimed teachings of Hirashima to the recited elements of the claimed invention. In rejecting the four independent claims (claims 2, 20, 24 & 26) in summary fashion, the Examiner provides no analysis and little explanation regarding how Hirashima's alleged teachings disclose the each element of the **claimed** invention. *See MPEP § 707.07(d)* (all grounds of rejection should be "fully and clearly stated" . . . "omnibus rejection" of groups of claims are improper.).

**d. Independent Claim 2**

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

The applied reference of Hirashima does not anticipate the invention of claim 2 under 35 USC § 102(b) because each of the elements of claim 2, as amended, is not disclosed by Hirashima. Moreover, Hirashima does not render amended claim 2 obvious under 35 USC. § 103(a) because Hirashima fails to teach, suggest or imply the invention defined by amended claim 2.

In particular, Hirashima fails to teach providing a multimedia presentation whereby a **first medium is stored to provide a first portion** and, based on **determining the content of a second medium, the first portion of the first medium is coordinated for output with the second medium.**

At best, Hirashima teaches that the teletext character translation data (corresponding to the first medium) might be buffered (stored) and, upon detection of the pilot tone, the teletext character data (first medium) is output as teletext character graphics along with the sub-audio and the conventional TV video. As applied, therefore, the recited second medium corresponds to either the sub-audio or the conventional TV video. However, Hirashima still fails to teach, suggest or imply that the coordinated output is based on **determining the content of the second medium** (i.e., the sub-audio or the conventional TV audio). Hirashima does not teach or suggest that the **content** of the conventional TV video is determined before the teletext translation can be output. Nor does Hirashima teach or suggest that the **content** of the sub-audio is determined before the teletext translation can be output.

In applicants' inventive approach, the first medium is stored, and upon determination of the **content** of the correct second medium, the coordinated output is provided. This would permit, for example, a plurality of second media to be received by the receiver station along with the first media. The first media would be output in coordinated fashion with one of the second media based on selecting the second media having the appropriate **content**. This, therefore, provides a flexibility and capability for personalization of multimedia presentations not even remotely contemplated by

Hirashima. This approach also permits the system to avoid erroneous or inappropriate multimedia presentations based on second medium content that is not meant for combination with certain first medium content or not meant for presentation to certain users. These objectives and the ability to consider the **content** of the second medium before presenting the multimedia presentation to the user are not remotely contemplated by Hirashima.

For at least the above reasons, applicants respectfully request that the rejection based on Hirashima be withdrawn.

Additionally, each of the claims dependent on claim 2 is patentable over Hirashima for at least the same reasons as set forth for independent claim 2.

#### (1) Dependent Claim 7

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium includes some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Hirashima.

In Hirashima, the second medium corresponds to the conventional TV video or the second language sub-audio that is output with the first medium corresponding to the teletext character translation. Certainly, the conventional TV video is not provided to and does not operate to “explain a significance of the content” of the teletext character translation. Also, the second language sub-audio is not provided to and does not operate to “explain a significance of the content” of the teletext character translation. If anything, the very opposite is true in Hirashima: the teletext character translation is provided to explain the meaning of the second language sub-audio. In sum, Hirashima does not teach or suggest the additional feature recited by dependent claim 7.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the audience member’s portfolio performed in comparison to the overall market as the audience member’s graphic (first medium) is presented.

The only arguably relevant feature in Hirashima would be the second language sub-audio that is sometimes presented as the second medium in conjunction with the teletext character translation of the first medium. However, as discussed above for claim 7, the second language sub-audio does not explain the teletext character translation. The opposite is true in Hirashima. Hirashima takes the completely opposite approach of claim 8, and accordingly, this reference does not disclose or suggest the invention of dependent claim 8.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. As discussed above for claim 2, if Hirashima is applied, the teletext translation character data corresponds to the recited first medium, and the conventional TV video and/or the second language sub-audio corresponds to the recited second medium. Hirashima does not teach or suggest the storage of the conventional TV video or the second language sub-audio, as would be required by claim 17, so that the stored conventional TV video/second language sub-audio can then be presented in coordinated fashion with the teletext translation. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Hirashima’s conventional approach.

(4) Dependent Claim 18

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Hirashima does not contemplate storing the second medium whatsoever, much less does it disclose or suggest this additional beneficial feature recited by claim 18.

e. Independent Claim 20

As amended, independent claim 20 recites a method for outputting a multimedia presentation including a first medium and a second medium. The recited method provides for **identifying content of a first medium from an external source based on an identifier, controlling the receiver station based on the step of identifying to respond to a separately received processor instruction, and responding to the processor instruction to coordinate a presentation of the first and second media based on identifying content of the second medium.**

The applied reference of Hirashima does not anticipate the invention of claim 20 under 35 USC § 102(b) because each of the elements of claim 20, as amended, is not disclosed by Hirashima. Moreover, Hirashima does not render amended claim 20 obvious under 35 USC. § 103(a) because Hirashima fails to teach, suggest or imply the invention defined by amended claim 20.

In particular, Hirashima fails to teach providing a multimedia presentation whereby **based on identifying the content of a first medium based on an identifier, the receiver station is controlled to respond to a separate processor instruction that**

causes a coordinated presentation of the first and second media **based on identifying the content of the second medium.**

At best, Hirashima might teach that the teletext character data (corresponding to the first medium) might be detected based on header ID data (corresponding to the identifier) and, upon detection of the pilot tone, the teletext character data (first medium) is output as teletext character graphics along with the sub-audio and the conventional TV video. As applied, therefore, the recited second medium would correspond to either the sub-audio or the conventional TV video.

As read, Hirashima would still fail to teach the recited feature whereby identifying the teletext character data (first medium) by detecting a header ID (identifier) controls the receiver station to respond to a “separately received” processor instruction. The only remotely relevant feature of Hirashima to the recited processor instruction is the “pilot tone” that indicates the presence of the sub-audio. However, Hirashima’s receiver station is not controlled to respond to the pilot tone (*arguendo*, the processor instruction) based on identifying the teletext character data. If anything, the very opposite is true: The detection of the pilot tone cues or enables the receiver station to search for and select the teletext character data.

Moreover, Hirashima still fails to teach, suggest or imply responding to a processor instruction that causes a coordinated output of the first and second media based on identifying **the content of the second medium** (i.e., the sub-audio or the conventional TV audio). Hirashima does not teach or suggest that the **content** of the conventional TV video is determined before the teletext can be output. Nor does Hirashima teach or suggest that the **content** of the sub-audio is determined before the teletext can be output.

In applicants’ inventive approach, the content of the first medium is identified, and upon identification of the **content** of the correct second medium, the coordinated output is provided. This would permit, for example, a plurality of second media to be received by the receiver station along with the first media. The first media would be

output in coordinated fashion with one of the second media based on selecting the second media having the appropriate **content**. This, therefore, provides a flexibility and capability for personalization of multimedia presentations not even remotely contemplated by Hirashima. This approach also permits the system to avoid erroneous or inappropriate multimedia presentations based on second medium content that is not meant for combination with certain first medium content or not meant for presentation to certain users. These objectives and the ability to consider the **content** of the second medium before presenting the multimedia presentation to the user are not remotely contemplated by Hirashima.

For at least the above reasons, applicants respectfully request that the rejection based on Hirashima be withdrawn.

Additionally, each of the claims depending from claim 20 is patentable over Hirashima for at least the same reasons as set forth above for independent claim 20.

#### (1) **Dependent Claim 22**

Dependent claim 22 further provides that controlling the receiver station to respond to the separately received processor instruction comprises “originating [the] second medium of [the] first and second media.” For example, in the Wall Street Week example supporting claim 22, the second medium may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 22 further provides that the second medium is locally generated or locally originated.

Hirashima does not disclose or suggest this additional feature. Applying Hirashima to amended claim 22, at best the teletext character data corresponds to the first medium, and the conventional TV video and/or sub-audio corresponds to the second medium. The conventional TV video and the sub-audio in Hirashima are conventional broadcast-type transmissions that originate remotely from the receiver station. Neither

the conventional TV video or the sub-audio are originated at the receiver station, as provided for in claim 22.

**f. Independent Claim 24**

As amended, independent claim 24 recites a method of outputting a multimedia presentation including a first medium and a second medium. A first and second media are received from different sources, and **content of the first medium is identified based on a control signal received at the receiver station** from a transmitter station. Based on identifying the first medium, a coordinated presentation of the first medium and the second medium is provided where the **first medium is output at a first output device** and the **second medium is output at a second output device**.

The applied reference of Hirashima does not anticipate the invention of claim 24 under 35 USC § 102(b) because each of the elements of claim 24, as amended, is not disclosed by Hirashima. Moreover, Hirashima does not render amended claim 24 obvious under 35 USC. § 103(a) because Hirashima fails to teach, suggest or imply the invention defined by amended claim 24.

In particular, the claim provides that a **second medium is to be coordinated for presentation with a first medium when a control signal identifies the correct or appropriate first medium**. Additionally, the two media are output on **two separate output devices** at the receiver station.

An example of claim 24 is applicants' Julia Child's cooking show scenario where the audience member selecting a recipe is provided with a presentation of the television program (one medium) on one output device (e.g., the TV) and a printout (the other medium) on another output device (e.g., a printer).

Hirashima does not disclose or suggest coordination of two different media based on identification of the content of one of the media based on a control signal. Hirashima's pilot tone simply indicates the presence of the sub-audio; it does not identify the **content**

of the sub-audio. Similarly, any header ID data in Hirashima's teletext character translation does not operate as per the recited control signal because Hirashima's header ID does not initiate or cause the coordinated presentation.

Additionally, Hirashima does not disclose or suggest the output of the first and second media on separate output devices, as per the claim. If Hirashima is applied to claim 24, at best one medium corresponds to the teletext and the other medium corresponds to the conventional TV video and/or the sub-audio. Either way, the first and second media are output on the same output device at the receiver station, the TV. Hirashima does not disclose or suggest the claimed approach wherein the appropriate content of a first medium is selected so that it can be output on one output device in coordinated fashion with a second medium to be output on a second output device.

Additionally, claim 25, which depends from claim 24, is patentable over Hirashima for at least the same reasons as set forth above.

#### **g. Independent Claim 26**

As amended, independent claim 26 recites a method for outputting a multimedia presentation including a first medium and a second medium. The recited method provides for **processing a first medium and a second medium** received from different sources for identifying the content of the first medium and the second medium, and outputting a simultaneous or sequential presentation of information from the first medium and the second medium **based on identifying the content of the first medium and the second medium.**

The applied reference of Hirashima does not anticipate the invention of claim 26 under 35 USC § 102(b) because each of the elements of claim 26, as amended, is not disclosed by Hirashima. Moreover, Hirashima does not render amended claim 26

obvious under 35 USC. § 103(a) because Hirashima fails to teach, suggest or imply the invention defined by amended claim 26.

In particular, Hirashima fails to teach providing a multimedia presentation whereby a multimedia presentation comprising information from two media is presented **based on identifying the content of the first medium and the content of the second medium.**

As discussed above for claim 20, Hirashima's second language sub-audio/teletext translation system fails to teach or suggest identifying the content of a first medium and identifying the content of a second medium. Detecting Hirashima's sub-pilot tone identifies the presence, **not the content**, of the sub-audio. Hirashima does not provide for detecting the content of the convention TV video whatsoever. In sum, Hirashima fails to teach or suggest identifying the content of media received at Hirashima's receiver station.

Moreover, Hirashima does not teach or remotely contemplate the claimed feature of outputting a multimedia presentation based on or conditioned on identifying the content of the media involved. In the claimed invention, the output of the first medium and second medium is based on identifying their respective content. This is not taught or suggested by Hirashima. In Hirashima, a presentation of the sub-audio and the conventional TV video and/or the teletext is based on detecting the presence of the pilot tone. It is not based on identifying the content of the sub-audio or the content of the TV video.

For at least the above reasons, applicants respectfully request that the rejection based on Hirashima be withdrawn.

Additionally, each of the claims depending from claim 26 is patentable over Hirashima for at least the same reasons as set forth above for independent claim 26.

**(1) Dependent Claim 27**

Dependent claim 27 further provides that the receiver station has a storage device and that the method includes the step of “storing . . . [the] two . . . media at [the] receiver station.”

Applying Hirashima to amended claim 27, the teletext character data corresponds to the first medium, and the conventional TV video and/or sub-audio corresponds to the second medium. The conventional TV video and the sub-audio in Hirashima are conventional broadcast type transmissions. Neither the conventional TV video or the sub-audio are stored at Hirashima’s receiver station, as per dependent claim 27.

**(2) Dependent Claim 28**

Claim 28, which depends from claim 27, further provides for “originating a portion of [the] multimedia presentation at [the] receiver station.” For example, in the Wall Street Week example supporting claim 28, the portion may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 28 further provides that a portion of the multimedia presentation is locally generated or locally originated.

Hirashima does not disclose or suggest this additional feature. Applying Hirashima to amended claim 28, at best the teletext character translation data corresponds to the first medium, and the conventional TV video and/or sub-audio corresponds to the second medium. The conventional TV video and the sub-audio in Hirashima are conventional broadcast-type transmissions that are originated remotely from the receiver station. Neither the conventional TV video or the sub-audio are originated at the receiver station, as provided for in claim 28.

**5. Rejections based on Jackson et al., G.B. Pat.  
No. 1,213,357.**

Paragraphs 42-43 reject claims 2, 3, 4, 6, 8-11, 13, 16, 20, 21, 23, 24, 26, 29 & 37 under 35 U.S.C. § 102 (b) as being unpatentable over Jackson et al., G.B. Pat. No. 1,213,357.

**a. Summary of Jackson et al., G.B. Pat. No.  
1,213,357.**

Jackson et al. discloses a method of program selection at a receiver station where a single television channel transmits a television still frame with audio information of each of a plurality of television programs. Associated with each cyclically displayed frame are signals identifying each frame to its related program wherein recognition at a receiver station of these identification signals allows for selection, storage and display of the frames. (Page 1, lines 15-25.)

A significant number of different sound components pertaining to respective programs can be transmitted by using a special sound sub-carrier which is modulated on a multiplex basis with the sound components and then added to the video signal containing the visual components. Additionally, program identification signals are added to the sound components of the programs for transmission therewith. (Page 1, lines 59-75.)

When the transmission is received at the receiver station, a subscriber can select a program based on a sampling pulse timing signal. (Page 3, lines 37-42.) Samples of the selected sound component are passed through a filter such that the output of the filter contains the selected sound signal and the identification signal. The sound signal is amplified and played, and the identification signal is further filtered and amplified for delivery to a gate pulse generator where it is used with line and field sync signals to control the opening of the video gate for the selected video component. Thus, when the sound has been selected, selection of only the appropriate vision signal components is

ensured by the timing of the identification signal added to the sound signal at the transmitter. (Page 3 lines 86-91.)

Jackson et al. fails to teach a receiver station that is "programmed" to receive user selected programming, but program selection is made as follows:

One method of operation is to produce the sampling pulses from the line synchronising [sic] pulses using a precisely timed delay. By arranging for this delay to be varied in steps by means of a programme selector switch S a viewer can be given control of the sampling pulse timing and hence can select the desired sound component.

(Jackson et al., P. 3, ll. 34-42.)

Thus, the receiver station enables the viewer to manipulate the sampling pulse timing signal to select the corresponding sound information associated with the pulse signal.

**b. Summary of Application of Jackson et al.,  
G.B. Pat. No. 1,213,357.**

The FOA characterizes Jackson's receiver station as having "user controlled circuitry ... for 'programming' the receiver station to select one of the audio presentation components...."

**c. Deficiencies of the Application of Jackson  
et al., G.B. Pat. No. 1,213,357.**

As an initial matter, applicants traverse the rejections based on Jackson because the rejections are rendered moot by the amendment to each of the independent claims rejected based on Jackson. Applicants further traverse the rejection on the basis that the Examiner has conspicuously failed to relate the claimed teachings of Jackson to the recited elements of the claimed invention. In rejecting the six independent claims (claims 2, 20, 24, 26, 29 & 37) in summary fashion, the Examiner provides no analysis and little explanation regarding how Jackson's alleged teachings disclose the entirety of the

claimed invention, as recited. *See* MPEP § 707.07(d)(all ground of rejection should be “fully and clearly stated” . . . “omnibus rejections” of groups of claims are improper.).

**d. Independent Claim 2**

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

Jackson fails to anticipate applicants’ amended claim recitation of the step of **storing a first medium** to provide a first portion of a multimedia presentation. Jackson’s video signal (which the FOA calls applicants’ first medium) is not stored at the receiver station but passed to the video gate that is controlled by the gate vertical pulse generator to display the correct video sequence. Additionally, applicants’ element of **determining the content of the second medium** (which the FOA assigns at as Jackson et al.’s audio signal) is not taught in Jackson, rather Jackson discloses selection by the user based on the program selector switch. Only the sync pulse is detected for controlling the presentation of the audio and video, but the sync pulse itself is not output as the second medium.

In sum, the applied art of Jackson fails to anticipate independent claim 2, as amended. Additionally, each of the claims depending from claim 2 is patentable over Jackson for at least the same reasons as set forth above for independent claim 2.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium provides information providing some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Jackson.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specification is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the overall market performed and how the audience member’s portfolio performed by comparison as the audience members graphic (first medium) is presented. This additional feature is not taught or suggested by Jackson.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Jackson.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would

allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Jackson does not contemplate storing the second medium in any manner whatsoever, much less does it disclose or suggest this additional beneficial feature recited by claim 18.

**e. Independent Claim 20**

Claim 20 is directed to a method of outputting a multimedia presentation at a receiver station. The method uses a processor instruction and an identifier which is received separately from the processor instruction. The receiver station is controlled to respond to the processor instruction by coordinating presentation of a first medium and a second medium, **based on identifying content of the second medium**. The **control is based identifying content of the first medium**. The identifier is included in a first of a plurality of signals received from a source external to the receiver station. The first signal is processed to provide the first medium and the identifier. The **identification of the content of the first medium is based on the identifier**.

Jackson fails to identify content of a first medium based on an identifier. As mentioned previously in the response to the rejection of claim 2 in this section, the first medium (video) is merely controlled for display by the gate vertical pulse generator. If the first medium were applied to the audio transmission in Jackson, there still is no identification of the content of the audio since the user merely selects the program selector switch to sample a different portion of the audio signal which thereby selects the corresponding video sequence. Jackson additionally fails to show a processor instruction that coordinates a presentation of a first and second medium.

In sum, Jackson fails to anticipate independent claim 20. Additionally, the claims depending from claim 20 are patentable over Jackson for at least the same reasons as set forth for independent claim 20.

**(1) Dependent Claim 22**

Dependent claim 22, which depends from claim 21, which depends from claim 20, further provides that the “step of controlling comprises **originating said second medium of said first and said second medium.**” Jackson teaches that the second medium (which the FOA calls the audio signal) is transmitted from a transmitter station to the receiver station. Jackson fails to teach or suggest that the audio signal is originated at the receiver station within the step of controlling the receiver station.

**f. Independent Claim 24**

Claim 24 is directed to a method of outputting a multimedia presentation at a receiver station. The multimedia presentation includes a first medium output at a first output device and a second medium output at a second output device. The first and second media are received at the receiver station from at least two different sources. A control signal is received at the receiver station from a remote transmitter station. Based on the control signal, **content of the first medium is identified at the receiver station. Coordination of the presentation of the first medium with presentation of the second medium is based on the identification.**

Jackson fails to identify content of a first medium based on an identifier. As mentioned previously in the response to the rejection of claim 2 in this section, the first medium (which the FOA calls Jackson video) is merely controlled for display by the gate vertical pulse generator. If the first medium were applied to the audio transmission in Jackson, there still is no identification of the content of the audio since the user merely selects the program selector switch to sample a different portion of the audio signal which thereby selects the corresponding video sequence.

**g. Independent Claim 26**

Claim 26 is directed to a method of outputting a multimedia presentation at a receiver station. At least two media are received at the receiver station **from different**

**sources.** Based on processing the two media, **content of a first and second of the at least two media is identified.** The multimedia presentation is **output based on the identification of content of both media.**

Jackson fails to identify content of a first medium based on an identifier. As mentioned previously in the response to the rejection of claim 2 in this section, the first medium (which the FOA calls Jackson's video) is merely controlled for display by the gate vertical pulse generator. If the first medium were applied to the audio transmission in Jackson, there still is no identification of the content of the audio since the user merely selects the program selector switch to sample a different portion of the audio signal which thereby selects the corresponding video sequence.

#### (1) Dependent Claim 27

Dependent claim 27, which depends from independent claim 26, further provides that the receiver station includes a **storage device**, wherein the method further comprises the step of **storing at least two of the plurality of media at the receiver station.**

Jackson et al. teaches a video store (Fig. 3(a)) that in which video fields are stored and are repeatedly read to the television display during the intervals between the wanted pictures. (P.3, ll. 11-14.) There is no indication in Jackson et al. that the audio signals are stored in the video store, but rather the audio signals are filtered to control the gate vertical pulse generator or else output from the audio amP. Jackson et al. does not contemplate storing the second medium whatsoever, much less does it disclose or suggest this additional beneficial feature recited by claim 27.

#### (2) Dependent Claim 28

Dependent claim 28, which depends from independent claim 27 (above), further provides the step of **originating** a portion of the multimedia presentation at the receiver station **based on the step of storing** from claim 27. Since Jackson fails to anticipate storing at least two of the plurality of media at the receiver station, it by necessity fails to

anticipate originating a portion of a presentation based on the step of storing at least two of the plurality of media.

**h. Independent Claim 29**

Claim 29 is directed to a method of outputting a multimedia presentation at a receiver station. In this method, a video image from a series of created images is outputted into the multimedia presentation. A control signal is processed at the receiver station that programs a processor to create a series of discrete video images. Content of a medium is identified. Based on this identification, an image of the series of images is output. The outputted image and the medium are combined into the multimedia presentation.

As mentioned previously, the FOA characterizes Jackson's receiver station as having "user controlled circuitry ... for 'programming' the receiver station to select one of the audio presentation components...." Jackson fails to teach a receiver station that is "programmed" to receive user selected programming, but instead, Jackson's receiver station enables the viewer to manipulate the sampling pulse timing signal to select the corresponding sound information associated with the pulse signal.

Jackson fails to identify content of a first medium based on an identifier. As mentioned previously in the response to the rejection of claim 2 in this section, the first medium (which the FOA equates to Jackson's video signal) is merely controlled for display by the gate vertical pulse generator. If the first medium were applied to the audio transmission of Jackson, there still is no identification of the content of the audio since the user merely selects the program selector switch to sample a different portion of the audio signal which thereby selects the corresponding video sequence.

Furthermore, Jackson fails to anticipate a control signal that programs a processor to create a series of discrete video images at a receiver station. The video images of

Jackson are clearly disclosed as being transmitted to the receiver station and not being created at it.

i. **Independent Claim 37**

Claim 37 is directed to a multimedia presentation apparatus. The multimedia presentation is based on a plurality of signals including at least two media. The apparatus includes a **storage device for storing a first medium to provide a first portion of the multimedia presentation**. At least one processor coordinates presentation of the first portion of the multimedia presentation with a presentation of a received second medium **based on determining content of the second medium**. An output device outputs the multimedia presentation based on the **coordination such that content of the first portion of the multimedia presentation has a predetermined relationship to content of the second medium**. At least one receiver receives the plurality of signals including the two media where at least a portion of the plurality of signals is received from a source external to the receiver station.

Jackson fails to anticipate applicants' amended claim recitation of a **storage device for storing a first medium to provide a first portion of a multimedia presentation**. Jackson fails to **determine content of a second medium**. As mentioned previously in the response to the rejection of claim 2 in this section, the second medium (which the FOA equates to Jackson's video) is merely controlled for display by the gate vertical pulse generator. If the second medium were applied to the audio transmission of Jackson et al., there still is no identification of the content of the audio since the user merely selects the program selector switch to sample a different portion of the audio signal which thereby selects the corresponding video sequence.

In sum, Jackson fails to anticipate independent claim 37, as amended. In addition, each claim depending from claim 37 is patentable over Jackson for at least the same reasons as set forth for independent claim 37.

**(1) Dependent Claim 41**

Dependent claim 41 depends indirectly upon claim 39 and provides for storing the second medium. Jackson does not provide for storing the second medium (video).

**6. Rejections based on Block et al., U.S. Pat. No. 4,225,884.**

Paragraphs 44-46 reject claims 2-5, 20-24, 26, 29 & 32-37 under 35 U.S.C. § 102 (b) as being unpatentable over Block et al., U.S. Pat. No. 4,225,884.

**a. Summary of Block et al., U.S. Pat. No. 4,225,884.**

Block discloses a subscription television system and method in which billing information regarding programs actually viewed by a subscriber of the system is accumulated over non-dedicated telephone lines.

A subscriber at the receiver station selects a program at a subscriber control unit (30) which transmits an accept signal to a code detector (64) in the control and storage unit of the receiver station. The code detector (64) when enabled by the accept signal detects a received scramble code and a received program code on the incoming scrambled video transmission. The received program code is transferred to a signal storage device (68) for later polling via an access unit (32) from a computer (20) at the central control station. The received scramble code is transmitted from the code detector (64) to a scramble code comparator (66) for comparison with a stored scramble code that has been previously transmitted to the receiver station from the computer (20) at the central control station. When a proper comparison is made between the stored scramble code and the received scramble code, the scramble code comparator generates video and audio unscramble control signals to unscramble the received scrambled program for presentation.

**b. Summary of Application of Block et al.,  
U.S. Pat. No. 4,225,884.**

The FOA applies the Block reference to applicants' claims by stating that the stored scramble code (allegedly corresponding to applicants' control signal) is communicated to the control and storage unit (allegedly corresponding to applicants' receiver station ) via telephone. Scramble codes (allegedly corresponding to applicants' second control signals) are transmitted in the received television programming signal and are input to a processor which compares the secondly received codes with the initially stored scramble code to determine if the scrambled video and audio should be unscrambled.

Additionally, the FOA states that the audio and video components of a television signal constitute signals from different kinds of sources, and that the comparison of the stored code to the received scramble code is provided based on the user's selection of the channel to receive the scrambled programming.

**c. Deficiencies of the Application of Block et al., U.S. Pat. No. 4,225,884.**

As an initial matter, applicants traverse the rejections based on Block because the rejections are rendered moot by the amendment to each of the independent claims rejected based on Block et al. Applicants further traverse the rejection on the basis that the Examiner has conspicuously failed to relate the claimed teachings of Block et al. to the recited elements of the claimed invention. In rejecting the seven independent claims (claims 2, 20, 24, 26, 29, 33 & 37) in summary fashion, the Examiner provides no analysis and little explanation regarding how Block et al.'s alleged teachings disclose the entirety of the **claimed** invention, as recited. *See MPEP § 707.07(d)* (all grounds of rejection should be "fully and clearly stated" . . . "omnibus rejections" of groups of claims are improper.).

d. **Independent Claim 2**

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

Block fails to anticipate the **storing** any component of the television transmission. The scrambled signals are passed through the modulator as scrambled (if there is no match of stored and received scramble codes) or unscrambled (if a match is determined). In short, Block's conditional access/usage monitoring system provides no teaching or suggestion of storing a first medium, such as Block's scrambled/unscrambled television transmission.

Additionally, there is no teaching of determining the **content** of anything received at Block's receiver station.

Finally, Block provides no teaching or suggestion whatsoever of providing a coordinated presentation of a stored first medium and a second medium based on determining the content of the first medium. Block's conditional access/usage monitoring system is directed to a completely different issue from that addressed by claim 2.

In sum, Block fails to anticipate independent claim 2, as amended. In addition, each claim depending from claim 2 is patentable over Block for at least the same reasons as set forth for independent claim 2.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium provides information providing some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Block.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the overall market performed and how the audience member’s portfolio performed by comparison as the audience members graphic (first medium) is presented. This additional feature is not taught or suggested by Block.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. The only item Block teaches being stored at the receiver station is the received scramble code. However, as discussed above in claim 2, Block’s scramble code cannot be applied to either applicants’ first or second medium since the scramble code of Block is not output in a multimedia presentation. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Block.

(4) Dependent Claim 18

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Block does not contemplate storing the second medium in any manner whatsoever, much less does it disclose or suggest this additional beneficial feature recited by claim 18.

e. Independent Claim 20

Claim 20 is directed to a method of outputting a multimedia presentation at a receiver station. The method uses a processor instruction and an identifier which is received separately from the processor instruction. The receiver station is controlled to respond to the processor instruction by coordinating presentation of a first medium and a second medium, **based on identifying content of the second medium**. The **control is based identifying content of the first medium**. The identifier is included in a first of a plurality of signals received from a source external to the receiver station. The first signal is processed to provide the first medium and the identifier. The **identification of the content of the first medium is based on the identifier**.

Block’s video and audio signals are passed through descramblers for presentation to a user if a matching scramble codes exists. Block fails to teach identifying content of either the video or audio (which the FOA applies to applicants’ first and second media) and then controlling the receiver station based on the identification. As previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be

descrambled. There is no identification of content of any media disclosed in Block et al. Additionally, Block fails to teach a received processor instruction that coordinates the presentation of first and second media based on identifying content of the second medium.

In sum, Block fails to anticipate independent claim 20, as amended. In addition, each claim depending from claim 20 is patentable over Block for at least the same reasons as set forth for independent claim 20.

#### (1) Dependent Claim 22

Dependent claim 22, which depends from claim 21, which depends from claim 20, further provides that the “step of controlling comprises **originating said second medium of said first and said second medium.**” Block et al. fails to anticipate any medium being originated at the receiver station within the step of controlling the receiver station.

#### f. Independent Claim 24

Claim 24 is directed to a method of outputting a multimedia presentation at a receiver station. The multimedia presentation includes a first medium output at a first output device and a second medium output at a second output device. The first and second media are received at the receiver station from at least two different sources. A control signal is received at the receiver station from a remote transmitter station. Based on the control signal, **content of the first medium is identified at the receiver station. Coordination of the presentation of the first medium with presentation of the second medium is based on the identification.**

Block’s video and audio signals are passed through descramblers for presentation to a user if matching scramble codes exist. Block fails to teach identifying content of either the video or audio (applied as applicants’ first and second media), and then coordinating presentation of the first and second media based on the identification. As

previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be descrambled. This determination does not involve identifying content of any media, as previously discussed.

In sum, Block fails to anticipate independent claim 24, as amended. In addition, claim 25, which depends from claim 24, is patentable over Block for at least the same reasons as set forth for independent claim 24.

#### **g. Independent Claim 26**

Claim 26 is directed to a method of outputting a multimedia presentation at a receiver station. At least two media are received at the receiver station **from different sources**. Based on processing the two media, **content of a first and second of the at least two media is identified**. The multimedia presentation is **output based on the identification of content of both media**.

Block's video and audio signals are passed through descramblers for presentation to a user if matching scramble codes exist. Block fails to teach identifying content of either the video or audio (applied as applicants' first and second media) and then outputting a presentation of the first and second media based on the identification. As previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be descrambled. This determination does not involve identifying content of any media, as previously discussed.

In sum, Block fails to anticipate independent claim 26, as amended. In addition, each claim depending from claim 26 is patentable over Block for at least the same reasons as set forth for independent claim 26.

(1) **Dependent Claim 27**

Dependent claim 27, which depends from independent claim 26, further provides that the receiver station includes a **storage device**, wherein the method further comprises the step of **storing at least two of the plurality of media at the receiver station**. Block does not contemplate storing the second medium whatsoever, much less does it disclose or suggest this additional beneficial feature recited by claim 27.

(2) **Dependent Claim 28**

Dependent claim 28, which depends from independent claim 27, (above), further provides the step of **originating** a portion of the multimedia presentation at the receiver station **based on the step of storing** from claim 27. Since Block fails to anticipate storing at least two of the plurality of media at the receiver station, it by necessity fails to anticipate **originating a portion of a presentation based on the step of storing at least two of the plurality of media**.

**h. Independent Claim 29**

Claim 29 is directed to a method of outputting a multimedia presentation at a receiver station. In this method, a video image from a series of created images is outputted into the multimedia presentation. A **control signal** is processed at the receiver station that **programs a processor to create a series of discrete video images. Content of a first medium is identified**. Based on this identification, an image of the series of images is output. The outputted image and the first medium are combined into the multimedia presentation.

Block fails to teach identifying content of either the video or audio (applied as applicants' first and second media) and then combining images into a presentation based on the identification. As previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a

received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be descrambled.

Finally, Block fails to teach the receiver station receiving a control signal to program a processor to **create** a series of discrete video images. The scrambled video programming of Block et al. is merely descrambled from its scrambled form upon a correct comparison of scramble codes. Neither is content of any media in Block et al. identified to provide a basis for outputting the created series of discrete video images.

### i. Independent Claim 33

Claim 33 is directed to a method of outputting a multimedia presentation at a receiver station. The multimedia presentation includes information from two signals. The receiver station is tuned to receive a second signal based on a **comparison of content identified from the first signal with data stored at the receiver station**. The **comparison is based on user response** received based on output of the first signal. The multimedia presentation is output and includes information from the first signal and information from the second signal.

The FOA equates the user response of Block with the selection of a particular carrier frequency at the program selection & access control unit (30), (column 6 lines 49-55). The program selection & access control unit (30) sends an accept signal to the control and storage unit (26) to allow a comparison between the incoming scrambled video code and the received/stored scramble code. Block fails to teach the **receipt of a user response based on outputting a first signal at the receiver station**. The alleged “user response” of Block is merely the tuning of a channel for receipt of television programming. Block’s “user response” is not based on the output of a first signal, such as by the viewer viewing a TV program. In Block, the user is merely attempting to tune a channel before any channel output would even exist.

Block also fails to teach identifying content of either the video or audio (applied as applicants' first and second media). As previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be descrambled. This does not involve any identification of content. Additionally, Block fails to teach **comparing, based on said user response, said identified content** to data stored at said receiver station and **tuning said receiver station to receive a second signal based on said step of comparing.**

In sum, Block fails to anticipate independent claim 33, as amended. In addition, each claim depending from claim 33 is patentable over Block for at least the same reasons as set forth for independent claim 33.

**j. Independent Claim 37**

Claim 37 is directed to a multimedia presentation apparatus. The multimedia presentation is based on a plurality of signals including at least two media. The apparatus includes **a storage device for storing a first medium to provide a first portion of the multimedia presentation.** At least one processor coordinates presentation of the first portion of the multimedia presentation with a presentation of a received second medium **based on determining content of the second medium.** An output device outputs the multimedia presentation based on the coordination such that **content of the first portion of the multimedia presentation has a predetermined relationship to content of the second medium.** At least one receiver receives the plurality of signals including the two media where at least a portion of the plurality of signals is received from a source external to the receiver station.

Block fails to teach a storage device for storing a first medium to provide a first portion of a multimedia presentation. Block's video and audio signals are passed through

descramblers for presentation to a user if matching scramble codes exist. Block fails to teach determining content of either the video or audio (as applied to applicants' first and second media) and then coordinating presentation of the first and second media based on the identification. As previously mentioned, the only logical determination in Block with respect to the presentation of television programming is the comparison of a received scramble code with a pre-stored scramble code to determine if the received video and audio programming is to be descrambled.

In sum, Block fails to anticipate independent claim 37, as amended. In addition, each claim depending from claim 37 is patentable over Block for at least the same reasons as set forth for independent claim 37.

**(1) Dependent Claim 41**

Dependent claim 41 which depends indirectly upon claim 39 and provides for storing the second medium. Block et al. does not provide for storing a second medium whatsoever. Accordingly, Block et al. fails to anticipate claim 41 at least for the above reasons.

**7. Rejections based on Moortgat-Pick in view of Schubin**

**a. Summary of Moortgat-Pick**

Moortgat-Pick is a German published patent Application No. 28 31 014. The application is in the German language with a brief English abstract. The subject matter of Moortgat-Pick is a combined radio and television receiver having a radio part and a television part.

**b. Summary of Moortgat-Pick**

Schubin is an article in Volume 86 of the SMPTE Journal titled "The First Nationwide Live Stereo Simulcast Network." The Schubin article describes a transnational live stereo simulcast network.

**c. Summary of the Application of Moortgat-Pick in view of Schubin**

Moortgat-Pick is applied to show a receiver with components for processing both television and radio broadcasts. Schubin, which generally discloses stereo simulcasting, is applied to show that the radio receiver and television receiver of Moortgat-Pick could be operated simultaneously with related programming.

**d. Deficiencies in the Application of Moortgat-Pick in view of Schubin**

The Examiner applies the combination of Moortgat-Pick and Schubin to show a **method of presenting** a stereo simulcast, presumably with the video related to the simulcast. However, neither references addresses such a method. For the German language Moortgat-Pick, the Examiner merely relies on the drawing to infer that the pictured **apparatus** outputs television video with radio programming. However, there is no explanation of any **method** for outputting television video with the radio audio. Schubin is an article that describes how the first transnational stereo simulcast was **transmitted**. Schubin is used by the Examiner to show that television video may be output with radio programming. However, Schubin does not address any **method** for outputting television video with radio programming.

Thus, **at best** this combination suggests no more than that television video can be output with radio programming by manually tuning to the television channel and an FM radio channel. No details as to how the television video is **coordinated** with radio programming at the receiver are provided by the applied art. The Examiner offers no explanation of how Moortgat-Pick's combined TV/FM receiver might actually operate to provide a **method** of receiving a TV video signal for presentation along with Schubin's FM simulcast. At the end of the day, therefore, the Examiner does not specifically set forth what the proposed combination of Moortgat-Pick and Schubin actually would teach as it relates to the claim elements. The Examiner has provided no analysis setting forth

the difference or differences in the claim over the applied references or any proposed modification of the applied references necessary to arrive at the claimed subject matter. As the Examiner has failed to apply the alleged teaching of the cited references to applicants' claims, the Examiner has failed to establish a *prima facie* rejection under 35 U.S.C. § 103(a).

**e. Independent Claim 2**

Paragraph 54 rejects claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Moortgat-Pick in view of Schubin. Moortgat-Pick and Schubin, alone or in combination, does not show or suggest each element of the invention defined by proposed claim 2. In particular, the recited references do not teach a receiver that receives two media wherein the receiver **stores a first medium, determines content of a second medium, and coordinates** the presentation at the receiver under computer control.

The Examiner relies on the television video and radio audio signals of a stereo simulcast to show a multimedia presentation. However, proposed claim 2 is amended to set forth that the receiver stores a first medium. The claimed invention would allow, for example, for storing information that is subsequently used to create an overlay to be combined with the television video. Neither Moortgat-Pick nor Schubin suggests storing either the television video or radio programming. There is no subsequent processing of a stored medium to provide particular output. To the contrary, both the radio programming and television video are output as they are received. The applied prior art fails to show or suggest storing a first medium as set forth in proposed claim 2.

Additionally, proposed claim 2 is amended to set forth a step of determining content of a second medium. In applicants' method, functions are based determining the content of media that are broadcast. For example, in one embodiment described in the specification, the receiver determines that the "Wall Street Week" program is received. The output of the multimedia presentation is based on that determination. Neither

Moortgat-Pick nor Schubin suggest any steps to coordinate the presentation at the receiver station based on determining content. There is no suggestion in the applied art to determine the content of either the television programming or radio programming at the receiver of Moortgat-Pick. Accordingly, the applied art fails to teach determining content of a second medium as set forth in proposed claim 2.

Proposed claim 2 is also amend to set forth coordinating a presentation based on the step of determining. In addition to not suggesting the step of determining as discussed above, Moortgat-Pick and Schubin do not teach or suggest coordinating the presentation at the receiver station under computer control. Again, Moortgat-Pick and Schubin merely suggest the possibility of outputting television video and radio programming that are received simultaneously. As discussed by Schubin, the difficulty in accomplishing this resides in transmitting the television programming and the radio programming in precise synchronization. In other words, all coordination in the applied art takes place at the transmitter stations. The receiver merely outputs what is received as it is received with no further coordination at the receiver station under computer control. Accordingly, Moortgat-Pick in view of Schubin fails to show or suggest coordinating, at the receiver station under computer control, a presentation as set forth in proposed claim 2.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 2 based on Moortgat-Pick and Schubin be withdrawn. Additionally, the claims depending from claim 2 are patentable over the applied art for at least the same reasons as set forth above for independent claim 2.

**(1) Dependent Claim 7**

Claim 7 depends upon independent claim 2. Applicants proposed to amend claim 7 to set forth that the “content of [the] second medium explains a significance of [the] content” of the first medium. Moortgat-Pick and Schubin as applied by the Examiner are

silent regarding the content of either the television video or radio programming.

Accordingly, applicants respectfully request the withdrawal of the rejection of claim 7 over Moortgat-Pick in view of Schubin for at least the above reasons.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” Again, Moortgat-Pick and Schubin as applied by the Examiner are silent regarding the content of either the television video or radio programming. They include no teaching that the radio programming explains the significance of the television programming. Accordingly, Moortgat-Pick in view of Schubin does not disclose or suggest the invention of dependent claim 8.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. As discussed above for claim 2, the receiver of Moortgat-Pick does not store the television programming or the radio programming. In fact, as described by Schubin the key to a stereo simulcast is to broadcast live television video and radio programming in exact synchronization such that they may be received together at the receivers for immediate simultaneous output. Accordingly, the claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not contemplated by Moortgat-Pick in view of Schubin.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would

allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Moortgat-Pick and Schubin do not suggest storing either the television or radio programming. In addition, these references do not suggest determining the content of either the television or radio programming. Thus, this art does not remotely contemplate storing any medium based on determining its content as recited by claim 18.

- 8. Rejections based on CBS/CCETT North American Broadcast Teletext Specification and Appendix B, CBS Broadcast Teletext System Standard, “Petition for Rulemaking”**
- a. Summary of CBS/CCETT North American Broadcast Teletext Specification**

CBS/CCETT relates to the extended Antiope teletext system whereby pages of teletext are transmitted in the vertical blanking interval (VBI) to decoders. Program-related “captioning” pages may be transmitted with the TV program and superimposed over the program. Unlike normal teletext messages where the user selects each page individually, in captioning the user must first select a captioning type, i.e., the user selects a “classification” of captions and a “level” (1-9). The decoder then stores captions transmitted as teletext based on the user’s selected caption type. A control packet or “reveal code” may then be sent with a reveal bit to cause a particular caption-type to be displayed. In sum, CBS/CCETT discusses a method of presenting time-delayed teletext captions stored according to a user selection of caption type and presented upon receipt of a reveal code.

**b. Summary of Appendix B, CBS Broadcast Teletext System Standard, “Petition for Rulemaking”**

The FCC Petition describes a captioning feature similar to what is disclosed in the CBS/CCETT reference. Accordingly, the FCC Petition and the CBS/CCETT references can collectively be referred to herein as the “Mode 2 Captioning” references.

**c. Summary of Application of CBS/CCETT North American Broadcast Teletext Specification in view of Summary of Appendix B, CBS Broadcast Teletext System Standard, “Petition for Rulemaking”**

Paragraphs 58-61 reject claims 2, 8-11, 24, 43-50 under 35 U.S.C. § 103(a) as being unpatentable over CBS/CCETT and the FCC Petition. In paragraph 58, the Examiner asserts that Mode 2 Captioning taught the transmission of program-related data categorized by different user levels (e.g., languages, expertise, etc.) that would be transmitted as teletext. The various levels of teletext would be transmitted ahead of the program to which they related and would be selected and stored by receiver stations according to the user level. At the appropriate time, a headend would transmit a reveal code that would cause different captions to be displayed at different receiver stations according to the user level teletext each receiver station had stored. In paragraph 60, the Examiner asserts that such Mode 2 Captioning systems would include a software-driven teletext decoder that would respond to reveal codes by executing processor instructions.

d. **Deficiencies in the Application of CBS/CCETT North American Broadcast Teletext Specification in view of Summary of Appendix B, CBS Broadcast Teletext System Standard, “Petition for Rulemaking”**

Although not explicitly stated, the Examiner’s rejection under § 103(a) is not based on a combination of CBS/CCETT and the FCC Petition. Instead, it is apparent that the Examiner makes the rejection based on the overall, cumulative teaching of the references, i.e., Mode 2 Captioning. However, if the Examiner offers these applied references as a proper combination, applicants reserve the right to point out the absence of proper motivation for the combination and failure to satisfy any of the other requirements for combining references under § 103.

In making the rejection under § 103(a), the Examiner is acknowledging that Mode 2 Captioning fails to disclose each and every limitation of the invention as claimed. Instead, there must be some modification of Mode 2 Captioning to “fill the gaps” and arrive at the claimed invention. However, the Examiner fails to establish a *prima facie* case of obviousness on two separate grounds. First, the Examiner fails to identify the missing limitations of the claimed invention that are not literally taught by Mode 2 Captioning. Therefore, the Examiner fails to discharge his obligation to demonstrate how the applied reference teaches or fairly suggests each of the claim elements. Moreover, because the Examiner does not identify those claim elements not literally found in the reference, there is no way for applicants to evaluate whether proper motivation for such modifications exists in the reference or the art. In sum, the *prima facie* case fails because the necessary modifications have not been identified by the Examiner, nor the motivation in the art for effectuating them.

Applicants further traverse the rejection based on Mode 2 Captioning because the rejections are rendered moot by the amendment to each of the independent claims.

e. **Independent Claim 2**

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

The applied reference of Mode 2 Captioning does not render amended claim 2 obvious under 35 USC. § 103(a) because Mode 2 Captioning fails to teach, suggest or imply each of the elements of amended claim 2.

In particular, Mode 2 Captioning fails to teach providing a multimedia presentation whereby a **first medium is stored to provide a first portion** and, based on **determining the content of a second medium, the first portion of the first medium is coordinated for output with the second medium**.

At best, Mode 2 Captioning teaches that the teletext character data (corresponding to the first medium) might be buffered (stored) and, upon detection of the reveal code, the teletext character data (first medium) is output as teletext character graphics along with the conventional TV video/audio. Therefore, the recited second medium at best corresponds to the conventional TV video/audio.

As applied, Mode 2 Captioning still fails to teach, suggest or imply that the coordinated output is based on **determining the content of the second medium** (i.e., the conventional TV video/audio). Nothing in Mode 2 Captioning remotely suggests that that the **content** of the conventional TV video or the **content** of the conventional TV audio is determined before the teletext can be output. Instead, in Mode 2 Captioning it is

the receipt of the reveal code that triggers the output of the teletext, not any sort of determination of the content of the TV video or audio.

For at least the above reasons, applicants respectfully request that the rejection based on Mode 2 Captioning be withdrawn. In addition, each claim depending from claim 2 is patentable over Mode 2 Captioning for at least the same reasons as set forth for independent claim 2.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium provides information providing some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Mode 2 Captioning.

In Mode 2 Captioning, the second medium corresponds to the conventional TV video/audio that is output with the first medium corresponding to the teletext character caption. Mode 2 Captioning’s conventional TV video/audio (second medium) does not explain the importance or significance of the teletext (first medium) because it is well known that conventional TV video/audio is intended for use independent of any teletext supplement.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in the 81 and 87 specification is where the Wall Street Week “talking head” verbally explains (audio of the second medium) how the audience member’s portfolio performed in comparison to the overall market as the audience member’s graphic (first medium) is presented.

However, as discussed above for claim 7, the second medium of Mode 2 Captioning (conventional TV video/audio) does not explain the first medium of Mode 2 Captioning (teletext character data). If anything, the opposite is true in Mode 2 Captioning: the teletext character data might explain or supplement the conventional TV video/audio. Mode 2 Captioning takes the completely opposite approach of claim 8, and accordingly, this prior art does not disclose or suggest the invention of dependent claim 8.

### **(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. As discussed above for claim 2, if Mode 2 Captioning is applied, at best the teletext character data corresponds to the recited first medium, and the conventional TV video/audio corresponds to the recited second medium. Mode 2 Captioning does not teach or suggest the storage of the conventional TV video/audio, as would be required by claim 17, so that the stored conventional TV video/audio can then be presented in coordinated fashion with the teletext. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Mode 2 Captioning’s conventional broadcast approach.

### **(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Mode 2 Captioning does not contemplate storing the

second medium (conventional TV video/audio) whatsoever, nor storing the second medium based on identifying its content.

**f. Independent Claim 24**

As amended, independent claim 24 recites a method of outputting a multimedia presentation including a first medium and a second medium. A first and second media are received from different sources, and **content of the first medium is identified based on a control signal received at the receiver station** from a transmitter station. Based on identifying the first medium, a coordinated presentation of the first medium and the second medium is provided where the **first medium is output at a first output device** and the **second medium is output at a second output device**.

The applied Mode 2 Captioning does not render amended claim 24 obvious under 35 USC. § 103(a) because Mode 2 Captioning fails to teach, suggest or imply the invention defined by amended claim 24.

In particular, the claim provides that a second medium is coordinated for presentation with a first medium when a control signal identifies the first medium so that the two media are output on **two separate output devices** at the receiver station.

An example of claim 24 is the Julia Child's scenario where the audience member selecting a recipe is provided with a presentation of the television program (one medium) on one output device (e.g., the TV) and a printout (the other medium) on another output device (e.g., a printer).

Mode 2 Captioning does not disclose or suggest the output of the first and second media on separate output devices, as per the claim. If Mode 2 Captioning is applied to claim 24, one medium corresponds to the teletext and the other medium corresponds to the conventional TV video/audio. Either way, the first and second media are output on the same output device at the receiver station, the TV. Mode 2 Captioning simply does not disclose or suggest the claimed approach wherein the appropriate content of a first

medium is selected so that it can be output on one output device in coordinated fashion with a second medium to be output on a second output device.

For at least the above reasons, applicants respectfully request that the rejection of claim 24 based on Mode 2 Captioning be withdrawn. In addition, each claim depending from claim 24 is patentable over Mode 2 Captioning for at least the same reasons as set forth for independent claim 24.

**g. Independent Claim 43**

As amended, independent claim 43 recites a method for a transmitter station to enable a receiver station in a network to output a multimedia presentation including a first portion of a first medium and a second medium. The transmitter station transmits an information transmission causing a receiver station to **store a first medium received from an external source** to provide the first portion of the presentation, **determine the content of a second medium, and coordinate a presentation of the first portion of the first medium with the second medium based on the determination.**

The applied reference of Mode 2 Captioning does not render amended claim 43 obvious under 35 USC. § 103(a) because Mode 2 Captioning fails to teach, suggest or imply the invention defined by amended claim 43.

In particular, Mode 2 Captioning fails to teach providing a multimedia presentation whereby a **first medium is stored to provide a first portion** and, based on **determining the content of a second medium, the first portion of the first medium is coordinated for output with the second medium.**

At best, Mode 2 Captioning teaches that the teletext character data (corresponding to the first medium) might be buffered (stored) and, upon detection of the reveal code, the teletext character data (first medium) is output as teletext character graphics along with the conventional TV video/audio. Therefore, the recited second medium corresponds to the conventional TV video/audio in Mode 2 Captioning.

As applied, Mode 2 Captioning still fails to teach, suggest or imply that the coordinated output is based on **determining the content of the second medium** (i.e., the conventional TV video/audio). Nothing in Mode 2 Captioning remotely suggests that that the **content** of the conventional TV video or the **content** of the conventional TV audio is determined before the teletext can be output. Instead, in Mode 2 Captioning it is the receipt of the reveal code that triggers the output of the teletext, not any sort of determination of the content of the TV video or audio.

For at least the above reasons, applicants respectfully request that the rejection of claim 43 based on Mode 2 Captioning be withdrawn. In addition, each claim depending from claim 43 is patentable over Mode 2 Captioning for at least the same reasons as set forth for independent claim 43.

#### (1) **Dependent Claim 46**

In conjunction with intervening dependent claims 44-45, dependent claim 46 further provides that a first identifier is used for determining the content of the second medium and a second identifier is used for determining the content of the first medium. Therefore, claim 46 provides that the content of both media are determined in order to present the coordinated presentation. As discussed above, Mode 2 Captioning does not provide for determining the content of the conventional TV video/audio as part of presenting the conventional TV video/audio with the teletext captions. Therefore, Mode 2 Captioning does not satisfy dependent claim 46.

### **9. Rejections based on Mainichi in view of Lunn**

#### **a. Summary of Mainichi**

Mainichi is British published Application No. 1 204 190. Mainichi describes a multiplex communications system in which a facsimile signal is included in the blanking interval of a television signal. A transmitter includes a facsimile transmitter and a terminal to which a television signal is supplied. A signal transformation block uses the

vertical and horizontal synchronization signals to transform the facsimile signal into pulse groups which are superimposed onto the video signal. The pulse groups are added into the blanking interval of the video signal. At a receiver, the video signal and synchronization signals are applied to a signal recovery block which transforms the pulse groups in the blanking interval back into a continuous facsimile signal. The facsimile signal is input to a facsimile receiver. Mainichi is applied to show a receiver that outputs both television and facsimile transmissions.

**b. Summary of the Application of Mainichi in view of Lunn**

The Examiner acknowledges that Mainichi fails to describes the details of the television receiver, but rather focuses on the circuitry for extracting the facsimile signal from the television signal. The Examiner relies on Lunn to show the functional components of a standard television receiver. Applicants note this combination includes no suggestion that there are any components that coordinate the output of the television program and the facsimile. Mainichi merely mentions that the system makes it possible while watching an educational program, to receive pictures for permanent record and that it is feasible to receive at pertinent intervals in the television reception specials news, program information, stock prices, and the like. There is no coordination at the receiver. The receiver simply outputs the facsimile and television program as they are received.

**c. Deficiencies in the Application of Mainichi in view of Lunn**

The Examiner has failed to relate the asserted teaching of Mainichi to claimed elements of claims 2, 4, 12, 13, 16, 20, 21, 23, 26, and 37. The Examiner rejects these claims in summary fashion by stating that they are rejected for the same reasons applied to claims 24 and 25. However, this summary rejection fails to provide any analysis regarding how the Mainichi teaching discloses each element of claims 2, 4, 12, 13, 16,

20, 21, 23, 26 and 27. *See MPEP 707.07(d)* (all ground of rejection should be “fully and clearly stated” . . . “omnibus rejections” of groups of claims are improper).

Mainichi fails to show any details of the television receiver. In the rejection, the Examiner appears to have relied on Lunn solely to show the features of a conventional television receiver that would be used by Mainichi. In fact, the Examiner relies on none of the features of Lunn in the applied rejections. Therefore, the Examiner does not appear to actually be applying a proper combination of Mainichi and Lunn. However, should the Examiner offer a proper combination, applicants reserve the right to point out the absence of motivation for the combination and failure to comply with any other requirements of combining references under § 103.

#### d. Independent Claim 2

Paragraph 63 rejects claim 2 under 35 U.S.C. § 103(a) based on Mainichi in view of Lunn. Mainichi and Lunn alone or in combination do not show or suggest each element of the invention defined by proposed claim 2. In particular, the communications system of Mainichi does not teach a receiver that receives two media wherein the receiver stores a first medium, **determines content of a second medium**, and **coordinates the presentation at the receiver under computer control**.

The Examiner relies on the television programming and the facsimile of Mainichi to show a multimedia presentation. Proposed claim 2 is amended to set forth a step of determining content of a second medium. Mainichi and Lunn do not suggest determining the content of a medium. In applicants’ method, functions are based on determining the content of media that are broadcast. For example, in one embodiment described in the specification, the receiver determines that the “Wall Street Week” program is received. The television receivers of Mainichi and Lunn do not make such a determination. The facsimile and television components of Mainichi are not coordinated based on determining the content of either the television signal or the facsimile signal. To the

contrary, the television program and facsimile are each independently output as they are received. Accordingly, the applied art fails to teach determining content of a second medium as set forth in proposed claim 2.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 2 based on Mainichi and Lunn be withdrawn. Additionally, those claims depending from claim 2 are patentable over Mainichi and Lunn for at least the same reasons discussed above.

**(1) Dependent Claim 7**

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium includes some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Mainichi in view of Lunn.

Standard television receivers as exemplified by Lunn simply display television programs. The receiver of Mainichi simply outputs television programming and facsimiles. Mainichi in view of Lunn does not teach or suggest a presentation coordinated at the receiver station where one medium explains the significance of another portion of the multimedia presentation. There is no suggestion that the television program explains the significance of the facsimile. Accordingly, Mainichi in view of Lunn does not teach or suggest the additional feature recited by dependent claim 7.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the

audience member's portfolio performed in comparison to the overall market as the audience member's graphic (first medium) is presented. As discussed above, Mainichi in view of Lunn does not teach or suggest that the television program explains the significance of the facsimile. Accordingly, Mainichi in view of Lunn does not disclose or suggest this additional feature of dependent claim 8.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for "storing [the] second medium at [the] receiver station." In other words, the invention provides for storing not only the first medium, but also the second medium. Neither Mainichi nor Lunn suggest storing the television programming. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not contemplated by Mainichi in view of Lunn.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the "second medium is stored based on [the] step of determining." In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Mainichi in view of Lunn does not suggest storing any medium whatsoever, nor does either suggest determining the content of any medium. This combination of references, thus, does not suggest storing any medium based on determining its content as recited by claim 18.

**e. Independent Claim 20**

Paragraph 63 rejects claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Mainichi in view of Lunn. The system for embedding facsimile signals in the

blanking interval of a television signal of Mainichi in view of Lunn does not show or suggest each element of the invention defined by proposed claim 20. In particular, the applied art does not show or suggest **identifying content of a first medium based on an identifier** and controlling the receiver station to respond to a **processor instruction** based on the identification. Also, the applied art lacks any suggestion of **responding to the processor instruction to coordinate presentation of the first and second media based on determining content of the second medium.**

Applicants propose to amend claim 20 to set forth identifying content of a first medium of a multimedia presentation and responding to a processor instruction to coordinate presentation of the first and second media of the presentation. According to this invention, content of a particular television program may be identified with an identifier received at the receiver. Based on the identity of the particular television program a processor instruction then causes additional matter, such as a graphic overlay, to be output with the television program to form a multimedia presentation. Mainichi at best shows the independent output of television programming and a facsimile. Lunn provides no relevant additional disclosure. Any relationship between output of the television program and the facsimile is based on the time they are transmitted, not on any identifier of the television program or the facsimile. Accordingly, the applied references fail to show or suggest identifying content of a first medium based on an identifier as set forth in proposed claim 20.

Proposed claim 20 is also amended to include the step of responding to the processor instruction to coordinate the presentation. Mainichi and Lunn, in addition to suggesting no coordination at the receiver station, suggest no processor instruction. The Examiner relies on the video sync signals to show a control signal. The sync signals are used, in addition to their standard use in the output of television video, to embed and extract the facsimile signal in the television signal. The sync signals are not used to coordinate the output of the television with the facsimile output. Mainichi, thus, fails to

suggest responding to a processor instruction to coordinate presentation of first and second media as set forth in claim 20.

Additionally, proposed claim 20 is amended to set forth that the step of responding to the processor instruction is based on identifying content of the second medium. In other words, the graphic overlay is coordinated with the television program based on identification of its content. Accordingly, the content of both media are identified. As discussed above, the receivers of Mainichi and Lunn do not identify the content of either of the television program or the facsimile. Thus, Mainichi in view of Lunn does not suggest receiver functions that are based on identifying both media of a multimedia presentation.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 20 based on Mainichi in view of Lunn be withdrawn. Additionally, those claims depending from claim 20 are patentable over Mainichi in view of Lunn for at least the same reasons discussed above for independent claim 20.

#### (1) Dependent Claim 22

Claim 21 depends upon independent claim 20. Applicants propose to amend claim 21 to set forth that the step of controlling of claim 20 includes “originating [the] second medium of [the] first and second media.” According to the claimed invention, for example, the overlay outputted with the television program is originated based on identifying the television programming. For example, a graphic of the viewer’s stock performance is created at the receiver based on identifying the “Wall Street Week” program. Neither the facsimile of Mainichi nor the television program of Mainichi or Lunn is originated based on identifying any television program or facsimile. Mainichi in view of Lunn thus fail to teach the added limitations of claim 22.

f.      **Independent Claim 24**

Paragraph 62 rejects claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Mainichi in view of Lunn. The system for embedding facsimile signals in the blanking interval of a television signal of Mainichi in view of Lunn does not show or suggest each element of the invention defined by proposed claim 24. In particular, the applied art does not show or suggest **identifying content of a first medium** based on a **control signal** and **coordinating presentation** of a multimedia presentation based on the identification.

Applicants propose to amend claim 24 to set forth identifying content of a first medium of a multimedia presentation based on a control signal. Mainichi to the contrary, simply outputs whatever facsimile is transmitted with the television programming. Mainichi includes no suggestion to identify content, much less to identify content based on a control signal. Lunn also fails to suggest identifying content. The Examiner relies on the video sync signals to show control signals. However, no identification is based on the video sync signals. Rather, the sync signals are merely used to extract the facsimile signal from the blanking interval of the television signal. Accordingly, Mainichi in view of Lunn fails to show or suggest identifying content of a first medium based on a control signal as set forth in proposed claim 24.

Proposed claim 24 is amended to include the step of coordinating a presentation, based on the step of identifying, of the first medium with the second medium. Thus, the invention provides for additional material to be coordinated with a television program based on identifying content in the television program. As discussed above, Mainichi and Lunn suggest no such coordination at the receiver station. The Mainichi system merely outputs television programming and facsimiles as they are received at the receiver station with no coordination. Mainichi in view of Lunn, thus, fails to suggest coordinating presentation as set forth in claim 24.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 24 based on Mainichi in view of Lunn be withdrawn. Claim 25, which depends from claim 24, is patentable over Mainichi in view of Lunn for at least the same reasons discussed above.

**g. Independent claim 26.**

Paragraph 63 rejects claim 26 under 35 U.S.C. § 103(a) as being unpatentable over Mainichi in view of Lunn. The system for embedding facsimile signals in the blanking interval of a television signal of Mainichi in view of Lunn does not show or suggest each element of the invention defined by proposed claim 26. In particular, the applied art does not show or suggest **identifying content of a first and content of a second medium and outputting the multimedia presentation based on the step of identifying.**

Applicants propose to amend claim 26 to set forth identifying content of a first and content of a second medium. As discussed above, applicants' claimed invention provides for outputting a multimedia presentation at a receiver station based on what content in is the received media. Also as discussed above, Lunn includes no suggestion to identify the content of television programming. Mainichi simply outputs whatever facsimile is transmitted with the television programming. Mainichi includes no suggestion to identify content of either the facsimile or of the television program. Accordingly, Mainichi in view of Lunn fails to show or suggest identifying content of a first and content of a second medium as set forth in proposed claim 26.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 26 based on Mainichi in view of Lunn be withdrawn. Those claims depending from claim 26 are patentable over Mainichi in view of Lunn for at least the same reasons discussed above.

**(1) Dependent Claim 27**

Dependent claim 27 further provides that the receiver station has a storage device and that the method includes the step of “storing . . . [the] two . . . media at [the] receiver station.” Neither Lunn nor Mainichi include any suggestion to store the television programming, as per dependent claim 27. Accordingly, Mainichi in view of Lunn does not suggest the added limitation of this dependent claim.

**(2) Dependent Claim 28**

Claim 28, which depends from claim 27, further provides for “originating a portion of [the] multimedia presentation at [the] receiver station.” For example, in the Wall Street Week example supporting claim 28, the portion may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 28 further provides a portion of the multimedia presentation is locally originated. There is no suggestion in Mainichi or Lunn to originate the facsimile locally. Of course, the advantage of a facsimile is that is transmitted from a remote location. Accordingly, Mainichi in view of Lunn do not suggest the added limitations recited in claim 28.

**h. Independent claim 37.**

Paragraph 63 rejects claim 37 under 35 U.S.C. § 103(a) as being unpatentable over Mainichi in view of Lunn. The system for embedding facsimile signals in the blanking interval of a television signal of Mainichi in view of Lunn does not show or suggest each element of the invention defined by proposed claim 37. In particular, standard television receivers, including Lunn, do not teach a receiver including a storage device for **storing a first medium** and a processor that coordinates a multimedia presentation based on **determining content of a second medium**.

Proposed claim 37 is amended to set forth that the processor coordinates a presentation based on determining the content of a second medium. Mainichi and Lunn

do not suggest determining the content of any medium. In applicants' claimed method, functions are based on determining the content of media that are broadcast. As discussed above, the processor may determine that the "Wall Street Week" program is received and coordinate the display of stock price data as a result. The television receivers of Mainichi and Lunn do not make such a determination. The facsimile and television components of Mainichi are not coordinated based on determining the content of either the television signal or the facsimile signal. To the contrary, the television program and facsimile are each independently output as they are received. Accordingly, the applied art does not teach a processor that coordinates based on determining content of a second medium as set forth in claim 37.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 102(b) of independent claim 37 based on Mainichi in view of Lunn be withdrawn. Those claims depending from claim 37 are patentable over Mainichi in view of Lunn for at least the reasons discussed above.

**(1) Dependent Claim 41**

Proposed claim 41 sets forth a storage device for "storing [the] second medium." As claim 37 set forth a device for storing the first medium, both media are stored by the claimed apparatus. The television receivers of neither Lunn nor Mainichi store the television programming. Accordingly, these references include no suggestion of a second device for storing a second medium in the applied references.

**10. Rejections based on Official Notice of Conventional TV/Teletext in view of Gunn et al., "A Public Broadcaster's View of Teletext in the United States"**

**a. Summary of Gunn et al., "A Public Broadcaster's View of Teletext in the United States"**

The Gunn reference, which explores how teletext might be implemented in the United States, proposes a mix of general information for the viewer and program-related information. Gunn proposes three levels of U.S. teletext: Level 1 (general data continuously retransmitted, such as a program guide and news), Level 2 (program-related data that changes from program to program), and Level 3 (quasi-interactive pages transmitted only at certain times). In Level 3, a program could present questions and, depending on the answer input by the user, one of the Level 3 pages could be selected/presented. Gunn also discusses in general terms the possibility of having a user be verbally instructed by a guest on the Wall Street Week program on how to analyze the user's portfolio using telesoftware via teletext. Gunn offers no details on this example, such as how the analysis is carried out or what kind of result would be presented.

**b. Summary of Application of Official Notice Conventional TV/Teletext in view of Gunn, et al., "A Public Broadcaster's View of Teletext in the United States"**

The Examiner takes Official Notice that TV distribution systems including origination stations and intermediate stations were well known in the art at the time of the invention. The Examiner also takes Official Notice that teletext distribution was also well known in the art at the time of the invention. *See* paragraph 64 of the FOA.

The Examiner asserts that Gunn proposes that teletext could be provided as program-related information that would supplement a conventional TV program. The Examiner also describes Gunn's Wall Street Week example as proposing that a user viewing Wall Street Week on the television might be audibly instructed on how to

analyze a portfolio using software downloaded via teletext into a separate home computer. *See* paragraph 64 of the FOA.

The Examiner concludes that it would be obvious to modify Conventional TV/Teletext to provide a program-related teletext service as discussed by Gunn. *See* paragraph 64.

c. **Deficiencies in the Application of Official Notice of Conventional TV/Teletext in view of Gunn, et al., "A Public Broadcaster's View of Teletext in the United States"**

As an initial point, applicants traverse the application of the undated Gunn reference as prior art because the Examiner has not demonstrated that Gunn was published prior to the priority date of the claims of this application. The subject matter defined by the claims rejected under Gunn enjoys the priority date of the 1981 specification, November 3, 1981 for the reasons set forth in Section III above. In applying a prior art reference, it is the Examiner's burden to demonstrate that the reference is prior art as against the claims. *See* MPEP § 706.02(a).

Applicants also traverse the Official Notice taken to Conventional TV/teletext. The Examiner's assertion is wholly unsupported, and he offers no explanation as to how his unsubstantiated television system/teletext system relates to the claimed invention. In particular, applicants traverse the modification of Conventional TV/teletext to somehow implement the ideas of Gunn on the basis that the combination is not enabling. Gunn itself provides no disclosure as to the specific configuration, specifications, or operations of the proposed system. Gunn offers some notions about desirable **objects or goals**, such as how having various levels of teletext might be useful. However, Gunn provides no teaching--not a single diagram or explanation--of how such a system might be configured or how such a system might work.

In fact, Gunn itself recognizes that it is not enabling for the program-related teletext/Wall Street Week idea that forms the basis of the Examiner's rejection. This is because Gunn readily admits that such "means of interaction is somewhat more complex and requires a more sophisticated decoder." *See Gunn* at 4. Moreover, Gunn makes no proposal for how to make or use such a "more sophisticated decoder." Therefore, Gunn does not provide an enabling teaching for implementing the Gunn concepts relied on by the Examiner in his rejection.

Moreover, in connection with Gunn's Wall Street Week notion, Gunn states that "[t]his assumes that the [more sophisticated] teletext decoder will be connected not only to the television set, but also to the home computer." *See Gunn* at 5. Thus, the "more sophisticated teletext decoder"--which itself is not enabled--would be coupled to a home computer in some unknown fashion. Gunn provides no diagram or explanation of how this might be accomplished. Gunn acknowledges the lack of enablement for combining the two in noting that implementing such advanced concepts would require further work to "explore the link between present teletext decoders and the home computer." *See Gunn* at 6.

The Conventional TV/teletext relied on by the Examiner in his Official Notice also fails to enable the combination. The Examiner has offered nothing in the way of justification for **how** Gunn could be used to modify the Examiner's unsubstantiated television/teletext system.

Therefore, the rejection based on the modification of Conventional TV/teletext based on Gunn should be withdrawn. That the proposed combination/modification is not enabled is confirmed by the further defect in the Examiner's rejection, which is the omission of any explanation of **how** Conventional TV/teletext would be modified to accommodate Gunn's ideas. The Examiner's failure to provide any explanation or analysis of **how** Conventional TV/teletext would be modified by Gunn's ideas to arrive at the claimed invention is a tacit admission that the combination is not enabled.

d. Independent Claim 2

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

The applied references of Gunn and Conventional TV/teletext does not render amended claim 2 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the invention defined by amended claim 2.

In particular, Gunn fails to teach providing a multimedia presentation whereby a **first medium is stored to provide a first portion** and, based on **determining the content of a second medium**, the **first portion of the first medium is coordinated for output with the second medium**.

Assuming, *arguendo*, that Gunn was enabling, at best it might teach that the teletext character data (corresponding to the first medium) might be buffered (stored) and upon user engagement of the teletext option the stored teletext character data (first medium) might be output with the conventional TV program (corresponding to the second medium).

As applied, Gunn still fails to teach, suggest or imply that the combined output is based on **determining the content of the second medium** (i.e., the conventional TV program). Nothing in Gunn, alone or as modified by Conventional TV/teletext, remotely suggests that that the **content** of the conventional TV program would be determined before the teletext can be output. Instead, in Gunn it would be the user selection of the

teletext option that would trigger the output of the teletext, not any sort of determination of the content of the TV program.

In short, Gunn, alone or as modified by Conventional TV/teletext, does not remotely suggest the approach of the claimed invention. For at least the above reasons, applicants respectfully request that the rejection based on Gunn/Conventional TV-teletext be withdrawn. In addition, each claim depending from claim 2 is patentable over the applied art for at least the same reasons as set forth for independent claim 2.

#### (1) Dependent Claim 7

Dependent claim 7 further provides that “the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation.” In other words, the **content** of the second medium that is output in coordinated fashion with the first medium provides information providing some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Gunn.

In Gunn, the second medium at best would correspond to the conventional TV program that is output with the first medium corresponding to the teletext character data. Gunn makes no suggestion whatsoever that the conventional TV video/audio (second medium) would explain the importance or significance of the teletext (first medium). It is well known that the conventional TV program is intended for use independent of any teletext supplement, and Gunn makes no suggestion for modifying the conventional TV program so that it would explain the significance of teletext that the TV program might or might not be presented with.

#### (2) Dependent Claim 8

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking

head” verbally explains (audio of the second medium) to the audience member how the overall market performed related to the audience member’s portfolio as the audience member’s graphic (first medium) is presented.

However, as discussed above for claim 7, the second medium of Gunn (conventional TV) does not explain the first medium of Gunn (teletext character data). If anything, the opposite would be true: the teletext character data might explain or supplement the conventional TV video/audio. Gunn’s idea would take the completely opposite approach of claim 8, and accordingly, this prior art does not disclose or suggest the invention of dependent claim 8.

### (3) Dependent Claim 17

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. As discussed above for claim 2, if Gunn is applied, the teletext character data corresponds to the recited first medium, and the conventional TV video/audio corresponds to the recited second medium. Gunn does not teach or suggest the storage of the conventional TV video/audio, as would be required by claim 17, so that the stored conventional TV video/audio can then be presented in coordinated fashion with the teletext. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Gunn.

### (4) Dependent Claim 18

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of

received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Gunn does not contemplate storing the second medium whatsoever, much less does Gunn disclose or suggest storing the second medium based on identifying its content.

e. **Independent Claim 20**

As amended, independent claim 20 recites a method for outputting a multimedia presentation including a first medium and a second medium. The recited method provides for **identifying content of a first medium from an external source based on an identifier, controlling the receiver station based on the identifying to respond to a separately received processor instruction, and responding to the processor instruction to coordinate a presentation of the first and second media based on identifying content of the second medium.**

The applied reference of Gunn, alone or in combination with Conventional TV/teletext, does not render amended claim 20 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the subject matter defined by amended claim 20.

In particular, Gunn fails to teach providing a multimedia presentation whereby **based on identifying the content of a first medium based on an identifier, the receiver station is controlled to respond to a separate processor instruction that causes a coordinated presentation of the first and second media based on identifying the content of the second medium.**

At best, Gunn in view of Conventional TV/teletext might teach that the teletext character data (corresponding to the first medium) might be identified based on header ID data (corresponding to the identifier) so that the teletext could be output to supplement a conventional TV program (corresponding to the second medium).

Even so, Gunn still fails to teach the recited feature that identifying the teletext character data (first medium) by detecting a header ID (identifier) controls the receiver station to respond to a “separately received” processor instruction. Gunn provides no discussion about processor instructions at all, much less separately received processor instructions that would control a receiver station in response to detecting the content of teletext.

Moreover, the applied art also fails to teach, suggest or imply responding to a processor instruction that causes a coordinated output of the first and second media based on identifying **the content of the second medium** (the conventional TV program). Gunn, alone or in combination with Conventional TV/teletext, does not teach or suggest that the **content** of the conventional TV program is determined before the teletext can be output.

In applicants' inventive approach, the content of the first medium is identified, and upon identification of the **content** of the correct second medium, the coordinated output is provided. This would permit, for example, a plurality of second media to be received by the receiver station along with the first media. The first media would be output in coordinated fashion with one of the second media based on selecting the second media having the appropriate **content**. This, therefore, provides a flexibility and capability for personalization of multimedia presentations not even remotely contemplated by Gunn/Conventional TV-teletext. This approach also permits the system to avoid erroneous or inappropriate multimedia presentations based on second medium content that is not meant for combination with certain first medium content or not meant for presentation to certain users. These objectives and the ability to consider the **content** of the second medium before presenting the multimedia presentation to the user are not remotely contemplated by applied art.

For at least the above reasons, applicants respectfully request that the rejection based on Gunn and Conventional TV/teletext be withdrawn. In addition, each claim

depending from claim 20 is patentable over the applied art for at least the same reasons as set forth for independent claim 20.

(1) **Dependent Claim 22**

Dependent claim 22 further provides that controlling the receiver station to respond to the separately received processor instruction comprises “originating [the] second medium of [the] first and second media.” For example, in the Wall Street Week example supporting claim 22, the second medium may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 22 further provides that the second medium is locally generated or locally originated.

The applied art does not disclose or suggest this additional feature. Applying Gunn to amended claim 22, the teletext character data corresponds to the first medium, and the conventional TV program corresponds to the second medium. Such a conventional TV program is not locally originated; rather, it is broadcast content that is transmitted from a remote location. Conventional TV/teletext adds nothing to Gunn in this regard.

f. **Independent Claim 24**

As amended, independent claim 24 recites a method of outputting a multimedia presentation including a first medium and a second medium. A first and second media are received from different sources, and **content of the first medium is identified based on a control signal received at the receiver station** from a transmitter station. Based on identifying the first medium, a coordinated presentation of the first medium and the second medium is provided where the **first medium is output at a first output device** and the **second medium is output at a second output device**.

The applied reference of Gunn, alone or in combination with Conventional TV/teletext, does not render amended claim 24 obvious under 35 USC. § 103(a) because

the applied art fails to teach, suggest or imply the invention defined by amended claim 24.

In particular, the claim provides that a **second medium is to be coordinated for presentation with a first medium when a control signal identifies the correct or appropriate first medium**. Additionally, the two media are output on **two separate output devices** at the receiver station.

An example of claim 24 is the Julia Child's scenario where the audience member selecting a recipe is provided with a presentation of the television program (one medium) on one output device (e.g., the TV) and a printout (the other medium) on another output device (e.g., a printer).

Gunn does not disclose or suggest coordination of two different media based on identification of the content of one of the media based on a control signal. In fact, Gunn's very conceptual disclosure says nothing about identifying content of any of Gunn's media (teletext and conventional TV) whatsoever.

Conventional teletext may include header ID data that indicates the presence of teletext, but such header ID data does not initiate or cause the coordinated presentation. Instead, in conventional teletext it is the user's engagement of the teletext option that initiates such a combined presentation.

In sum, Gunn, alone or as modified by Conventional TV/teletext, fails to teach or fairly suggest the coordination of two different media based on identification of the content of one of the media from a control signal.

Additionally, the applied art does not disclose or suggest the output of the first and second media on separate output devices, as per the claim. In Gunn's Level 2 teletext example, a first medium comprising teletext and a second medium comprising a conventional TV program would be output on the TV, not on separate output devices. Gunn does discuss the Wall Street Week example in terms of a decoder coupled to a home computer, but this nonenabling discussion fails to disclose or suggest what medium

would be output on which device and how. The Examiner's application of Conventional TV/teletext adds nothing to Gunn in this regard.

In short, Gunn, alone or as modified by Conventional TV/teletext, does not remotely suggest the approach of the claimed invention. For at least the above reasons, applicants respectfully request that the rejection based on Gunn/Conventional TV-teletext be withdrawn. In addition, claim 25, which depends from claim 24, is patentable over the applied art for at least the same reasons.

#### **g. Independent Claim 26**

As amended, independent claim 26 recites a method for outputting a multimedia presentation including a first medium and a second medium. The recited method provides for **processing a first medium and a second medium** received from different sources. **for identifying the first medium and the second medium**, and outputting simultaneous or sequential presentation of information from the first medium and the second medium **based on identifying content of the first medium and the second medium**.

The applied reference of Gunn, alone or in combination with Conventional TV/teletext, does not render amended claim 26 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the invention defined by amended claim 26.

In particular, Gunn fails to teach providing a multimedia presentation whereby **based on identifying the content of the first medium and the content of the second medium**, a multimedia presentation comprising information from the two media is presented.

As discussed above for claim 20, Gunn fails to teach or suggest identifying the **content of both the first medium (e.g., teletext)** and identifying the **content of a second medium (e.g., conventional TV)**. Gunn does not teach or suggest any means or

technique, or even motivation, for identifying the content of Gunn's the conventional TV program. Likewise, Gunn does not provide for identifying the content of the teletext. Conventional television/teletext adds nothing to Gunn in this regard. In sum, the applied art fails to teach or suggest identifying this feature of amended claim 26.

Moreover, the applied art does not teach or remotely contemplate the claimed feature of outputting the multimedia presentation based on or conditioned on identifying the content of the media involved. In the claimed invention, the output of the first medium and second medium is based on identifying their respective content. This is not taught or suggested by Gunn, alone or in combination with Conventional TV/teletext.

For at least the above reasons, applicants respectfully request that the rejection based on Gunn/Conventional TV-teletext be withdrawn. In addition, each claim depending from claim 26 is patentable over this applied art for at least the same reasons as set forth for independent claim 26.

#### **(1) Dependent Claim 27**

Dependent claim 27 further provides that the receiver station has a storage device and that the method includes the step of "storing . . . [the] two . . . media at [the] receiver station."

Applying Gunn to amended claim 27, the teletext character data corresponds to the first medium, and the conventional TV video corresponds to the second medium. The conventional TV of Gunn is a conventional broadcast type transmission that is not stored at Gunn's receiver station before combining it with teletext. Conventional TV/teletext adds nothing to Gunn in this regard.

#### **(2) Dependent Claim 28**

Claim 28, which depends from claim 27, further provides for "originating a portion of [the] multimedia presentation at [the] receiver station." For example, in the

Wall Street Week example supporting claim 28, the portion may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 28 further provides a portion of the multimedia presentation is locally generated or locally originated.

Gunn does not disclose or suggest this additional feature. Applying Gunn to amended claim 28, the teletext character data corresponds to the first medium, and the conventional TV program corresponds to the second medium. The conventional TV program of Gunn is a conventional broadcast type transmission originated remotely from the receiver station. Conventional TV/teletext adds nothing to Gunn in this regard.

#### **h. Independent Claim 29**

As amended, independent claim 29 is directed to a method for outputting a multimedia presentation wherein a **control signal causes a receiver station to create a series of discrete video images, the content of a first medium is identified, and based on identifying the content of the first medium a video image from the series of discrete images is output with the first medium.**

The applied reference of Gunn, alone or in combination with Conventional TV/teletext, does not render amended claim 29 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the invention defined by amended claim 29.

First, Gunn does not teach or suggest a control signal that causes a receiver station to create a series of discrete video images. At best, Gunn, like conventional teletext, teaches that teletext character codes can be transmitted, buffered, and converted by a character generator into their corresponding graphic symbols. Neither Gunn or conventional teletext teaches a control signal that would cause a receiver station to create a series of discrete, complete video images.

In applicants' approach, a control signal can cause a series of images to be created in advance so that at the appropriate time, such as when the first medium is detected, one of the complete images can be selected for output. This approach is not even remotely contemplated by Gunn's conventional teletext approach.

Next, Gunn, alone or in combination with conventional teletext, does not teach or suggest identifying the content of a first medium so that one of the video images can be selected for output with the appropriate first medium. If Gunn were somehow applied to this claim feature, Gunn would have to create a series of complete video images that would be stored in memory (which it does not), and then the content of one of Gunn's conventional TV programs would be identified for output with one of the stored complete video images. Gunn does not provide for identifying the content of TV programs whatsoever. Nor does Gunn provide for identifying content of TV programs so that a TV program can be presented with a complete video image.

The claimed approach is not remotely contemplated by Gunn. The Conventional TV/teletext referred to by the Examiner adds nothing to Gunn in this regard. For at least the above reasons, applicants respectfully request that the rejection based on Gunn/Conventional TV-teletext be withdrawn. Dependent claim 29 is patentable over this applied art for at least the same reasons as set forth above.

#### i. **Independent Claim 37**

As amended, independent claim 37 recites a receiver station apparatus for outputting a multimedia presentation including a first portion of a first medium and a second medium. The receiver station includes a storage device for **storing a first medium received from an external source** to provide the first portion of the presentation. Based on **determining the content of a second medium**, a processor **coordinates a presentation of the first portion of the first medium with the second**

**medium based on the determination. The content of the first portion of the first medium has a predetermined relationship to the content of the second medium.**

The applied reference of Gunn, alone or in combination with Conventional TV/teletext, does not render amended claim 37 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the invention defined by amended claim 37.

Claim 37 recites a receiver station apparatus adapted to perform the method substantially embraced by claim 2. Accordingly, claim 37 is patentable over Gunn, alone or in combination with Conventional TV/teletext, for at least the same reasons as discussed above for claim 2. Additionally, those claims depending from claim 37 are patentable over this cited art for at least the same reasons as set forth above for independent claim 37.

#### **(1) Dependent Claim 41**

Dependent claim 41 further recites structure for “storing [the] second medium.” As discussed above for dependent claim 17, the applied art fails to teach or suggest storing the second medium.

#### **11. Rejections based on Zaboklicki, DE 2,904,981.**

Paragraphs 66-72 reject claims 2-31 & 33-36, under 35 U.S.C. § 103(a) as being unpatentable over Zaboklicki, DE 2,904,981.

##### **a. Summary of Zaboklicki, DE 2,904,981.**

To the extent that this nearly unintelligible reference can be understood, Zaboklicki appears to relate to a method for transmitting television signals, particularly to implement interactive television viewing, which makes possible the reception of specially programmed television broadcasts. Zaboklicki discusses the use of an unspecified digital processing program to control a receiver station based on a viewer’s response to select additional transmitted information for presentation with the broadcast television program.

In particular, Zaboklicki indicates that the additional information may come in the form of supplemental analog audio information (via separate audio channel) or supplemental alphanumerics/graphics (via teletext). *See Appendix B at 3.* Zaboklicki aspires to provide a level of quasi-interactivity (i.e., one not requiring a true real-time backchannel) by allowing the user to input responses that, under the control of the unspecified digital software program, cause the selection of the supplemental information. *See Appendix B at 10, 12, 17.* For example, teletext fragments of supplemental alphanumerics may be selected using their "identification data." *See Appendix B at 17.* Or supplemental audio may be presented to multiple users via infrared audio connection to each of their headphones. *See Appendix B, Figure 5.*

What is clearly absent from Zaboklicki is any teaching or suggestion that the broadcast television programming comprises identification data that is used to determine the content of the television program before it is combined or otherwise presented with supplemental content.

**b. Summary of Application of Zaboklicki,  
DE 2,904,981.**

The FOA equates applicants' first medium to Zaboklicki's broadcast television programming, and the second medium to the additional (audio) information comprising identification data of the individual segments of the broadcast; applicants' user response to Zaboklicki's viewer answer input at the receiver station; and applicants' outputted multimedia presentation to Zaboklicki's presentation of the broadcast television programming that is switched for output with the additional audio information based on the viewer's response.

**c. Deficiencies in the Application of  
Zaboklicki, DE 2,904,981.**

As an initial matter, applicants traverse the application of this reference on the basis that it is not only not enabling, but it is not even clear what Zaboklicki purports or

attempts to teach in the first place. The particular document relied on by the Examiner's rejection is a faulty English translation of a German version of a Polish patent application. The faulty English translation is nearly incomprehensible and, in fact, the Examiner himself was forced to make numerous annotations, insertions, and corrections (as reflected in the Examiner's mark-up) in order to fill gaps and otherwise correct errors. In an effort to cure some of the difficulties with this reference, applicants had the document re-translated, as reflected in Appendix B. Even with a corrected translation, however, Zaboklicki is a fatally flawed reference.

Specifically, applicants strongly traverse the Examiner's taking of Official Notice in paragraph 66 that Zaboklicki exemplifies "interactive display systems" that were "notoriously well known" in the art. According to the Examiner, such "interactive display systems" or so-called "dialogue" systems employed well known "branching" techniques that would allow a series of fragments to be "stringed together" to "create one of . . . many versions . . . which corresponds to . . . to inputs/response of [the] user." The Examiner goes so far as to assert that such "notoriously well known" systems would allow user inputs during the course of a presentation to determine whether the user would see a presentation with "a happy ending or . . . with a sad ending." The Examiner's assertion that such "dialogue" systems were "notoriously well known" is wholly unsupported. Moreover, Zaboklicki, however it is read/translated, does not even remotely disclose what the Examiner asserts. In sum, applicants strongly object to the taking of Office Notice regarding Zaboklicki.

Applicants further traverse the rejections based on Zaboklicki because the rejections are rendered moot by the amendment to each of the independent claims rejected based on Zaboklicki. Applicants further traverse the rejection on the basis that the Examiner has conspicuously failed to relate the claimed teachings of Zaboklicki to the recited elements of the claimed invention. In rejecting the six independent claims (claims 2, 20, 24, 26, 29 & 33) in summary fashion, the Examiner provides little analysis

and explanation regarding how Zaboklicki's alleged teachings disclose the **entirety of the claimed invention**, as recited. *See* MPEP § 707.07(d) (all grounds of rejection should be "fully and clearly" stated . . . "omnibus rejections" of groups of claims are improper.).

Applicants traverse the instant obviousness rejection based on Zaboklicki, since in order to support a § 103 rejection based on the modification of a single reference, the Examiner must provide specific evidence to show **why** one of ordinary skill would be motivated to modify the reference in such a way to incorporate all of the claimed elements. In particular, in the § 103 rejection based on Zaboklicki the Examiner has not identified the modifications necessary to arrive at the claimed invention, nor the necessary motivation to make them. The rejection should be withdrawn because the Examiner has failed to establish a *prima facie* case of obviousness.

#### d. Independent Claim 2

As amended, independent claim 2 recites a method for outputting a multimedia presentation including a first portion of a first medium and a second medium. The recited method provides for **storing a first medium received from an external source** to provide the first portion of the presentation, **determining the content of a second medium**, and **coordinating a presentation of the first portion of the first medium with the second medium based on the determination**, where the **content of the first portion of the first medium has a predetermined relationship to the content of the second medium**.

Whatever the confusing Zaboklicki reference does teach, it certainly does not teach or suggest the elements of independent claim 2, as amended. At best, Zaboklicki teaches that under the control of a digital software program user inputs may be used to select supplemental audio or teletext graphics for presentation with a conventional TV program.

Applying Zaboklicki to claim 2, Zaboklicki's conventional TV program would correspond to the recited first medium and supplemental audio/teletext graphics would correspond to the recited second medium. As applied, however, Zaboklicki's conventional TV program (first medium) **is not stored** as part of a process of rendering a coordinated multimedia presentation, as would be required by claim 2. There is no suggestion of this step taking place in Zaboklicki whatsoever.

If Zaboklicki were applied to claim 2 in the reverse fashion, Zaboklicki's supplemental audio/teletext graphics would correspond to the recited first medium and his conventional TV program would correspond to the recited second medium. As applied, however, the content of Zaboklicki's conventional TV program (second medium) **is not determined** as part of a process of rendering a multimedia presentation, as would be required by claim 2. There is no suggestion of this step taking place in Zaboklicki whatsoever.

In summary, applicants submit that whatever Zaboklicki does disclose, and however it is applied, it does not teach or fairly suggest the inventive subject matter defined by claim 2. Additionally, those claims depending from claim 2 are patentable over Zaboklicki for at least the same reasons as set forth for independent claim 2.

#### (1) Dependent Claim 7

Dependent claim 7 further provides that "the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation." In other words, the **content** of the second medium that is output in coordinated fashion with the first medium provides information providing some explanation or evaluation of the meaning or importance of the content of the first medium. Because Zaboklicki fails to teach or fairly suggest all of the elements of independent claim 2, dependent claim 7 is patentable over Zaboklicki for at least the same reasons.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the overall market performed and how the audience member’s portfolio performed by comparison as the audience members graphic (first medium) is presented. Because Zaboklicki fails to teach or fairly suggest all of the elements of independent claim 2, dependent claim 8 is patentable over Zaboklicki for at least the same reasons.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not remotely contemplated by Zaboklicki. As demonstrated above in connection with independent claim 2, however applied, Zaboklicki does not teach or suggest storing both media as part of a process of rendering a coordinated multimedia presentation, as required by claim 17. In particular, Zaboklicki does not teach or fairly suggest that both Zaboklicki’s conventional TV program (one medium) and Zaboklicki’s supplemental audio/teletext (the other medium) would be stored as part of providing a combined presentation.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of

received second media to be selected and stored before it is presented in coordinated fashion with the first medium. However applied, Zaboklicki does not contemplate storing the second medium based on the step of determining content of the second medium.

e. **Independent Claim 20**

Claim 20 is directed to a method of outputting a multimedia presentation at a receiver station. The method uses a processor instruction and an identifier which is received separately from the processor instruction. The receiver station is controlled to respond to the processor instruction by coordinating presentation of a first medium and a second medium, **based on identifying content of the second medium**. The **control is based identifying content of the first medium**. The identifier is included in a first of a plurality of signals received from a source external to the receiver station. The first signal is processed to provide the first medium and the identifier. The **identification of the content of the first medium is based on the identifier**.

Zaboklicki fails to teach or suggest the proposed claim recitation of **controlling the receiver station to respond to a processor instruction which is separately received from said identifier, based on said step of identifying**. Applicants' proposed step of identifying is identifying content of the first medium based on an identifier. If the transmitted television programming of Zaboklicki is applied as applicants' recited first medium, Zaboklicki fails to teach or suggest the broadcast television programming that is **identified for content**. If Zaboklicki's supplemental audio information is applied as applicants' recited first medium, Zaboklicki would fail to teach or fairly suggest **controlling the receiver station to respond to a processor instruction** (e.g., Zaboklicki's digital processing program) based on any alleged step of identifying such audio. Zaboklicki does not teach or remotely suggest that the processor instruction

(digital processing program) is responded to based upon detecting content of supplemental audio. If anything, the opposite would be true.

Finally, Zaboklicki fails to teach or suggest responding to the processor instruction to coordinate presentation of said first and said second media **based on identifying content of said second media**. Whether applicants' first medium is alleged to correspond to applied to Zaboklicki's conventional TV program or Zaboklicki's supplemental audio/teletext, Zaboklicki does not provide for identifying the content of the other medium so that the **content of both of the media have been determined** as part of the method of rendering a coordinated presentation of both media.

In sum, applicants request that the rejection of claim 20 based on Zaboklicki be withdrawn for the reasons set forth above. Additionally, those claims depending from claim 20 are patentable over this cited art for at least the same reasons as for independent claim 20.

**(1) Dependent Claim 22**

Dependent claim 22, which depends from claim 21, which depends from claim 20, further provides that the "step of controlling comprises **originating said second medium of said first and said second medium**." Claim 22 is patentable over Zaboklicki for at least the same reasons as set forth above for claim 20.

**f. Independent Claim 24**

Claim 24 is directed to a method of outputting a multimedia presentation at a receiver station. The multimedia presentation includes a first medium output at a first output device and a second medium output at a second output device. The first and second media are received at the receiver station from at least two different sources. A control signal is received at the receiver station from a remote transmitter station. Based on the control signal, **content of the first medium is identified at the receiver station**.

**Coordination of the presentation of the first medium with presentation of the second medium is based on the identification.**

Zaboklicki fails to teach **identifying content of a first medium of a multimedia presentation at the receiver station based on a control signal**, and subsequently, **coordinating a multimedia presentation of the first and second media at a first and second output device, respectively, based on the identification of the content of the first medium.**

The FOA states that Zaboklicki's telesoftware and/or fragment identifiers correspond to applicants' control signal, wherein the telesoftware and program fragment identifiers are used as the basis for outputting a multimedia presentation on at least two output devices, i.e., a speaker, video monitor and printer. However, the FOA makes no specific reference to Zaboklicki's disclosure to demonstrate how the telesoftware and/or fragment identifiers allegedly accomplish this task. Applicants will analyze Zaboklicki's disclosure starting at the output devices and determining what sort of multimedia presentation is provided.

Applicants first turn to the printer recited in the claim 14 of Zaboklicki which has the function of a data recorder. Claim 14 recites that, "the output signals of the local central processor turn on the recording of the selected information in the local printer." To determine what the "selected information" is of dependent claim 14, one must look to claim 1 upon which claim 14 depends. Claim 1 of Zaboklicki recites:

Method for transmitting television signals in which a broadcast is transmitted at least partly in digital form, characterized in that a local central processor switches the data selector circuits for parts of the broadcast as a result of at least two consecutive answers by the television viewer and due to the centrally transmitted digital processing program.

Therefore, the "selected information" is the "at least two consecutive answers by the television viewer." However, Zaboklicki's "at least two consecutive answers" cannot be considered a **medium of a multimedia presentation**. Additionally, Zaboklicki in the

first paragraph of the explanation of Fig. 3, merely states that, "37 designates a printer." Fig. 3 shows a line connected from an output circuit 49 of central processor 6 to printer 37. There is no additional information in Zaboklicki on the printer other than its connection to the output device 49 in Fig. 3, and its claim to record selected information in claim 14. Zaboklicki fails to teach or suggest that the printer 37 is used in the output of a coordinated multimedia presentation. There is no other teaching or suggestion in Zaboklicki that the printer is a part of a multimedia presentation of coordinated media.

The remaining two output devices of Zaboklicki are the audio speaker and the video monitor. As mentioned in the general characterization of Zaboklicki, supplemental audio may be broadcast to the local receiver station for selected output to a user via an infrared communication device during a video presentation.

However, there is no teaching or suggestion in Zaboklicki that the **broadcast television programming**, apart from the supplemental audio information, **comprises identification data for individual fragments of the broadcast**. The identification data is limited only to the additional information that is switched at the receiver station for output in place of and to supplement the broadcast television programming.

In analyzing the application of Zaboklicki to applicants' proposed amended claim recitation, Zaboklicki fails to teach or suggest **identifying content of the first medium at the receiver station based on the control signal**. The proposed amended claim 24 recites that only one of the first and second media contains television programming including audio and video. Zaboklicki's transmitted television broadcast would then by necessity correspond to applicants' first medium since the FOA's application of Zaboklicki's additional audio information was directed to applicants' recited second medium. The FOA applied Zaboklicki's digital processing program to applicants' received control signal. However, Zaboklicki fails to teach or suggest identifying content of the television programming based on the transmitted digital processing program. There is no suggestion whatsoever that Zaboklicki's digital processing program (control

signal) operates to identify the content of Zaboklicki's conventional TV program (first media). Zaboklicki, if anything, teaches the opposite: that the digital processing program may be used for selecting supplemental content (e.g., teletext) comprising the *second media* based on user input.

Therefore, Zaboklicki fails to teach or suggest the **identification of content of the first medium as applied to claim 24**. By necessity, Zaboklicki then fails to teach **coordinating presentation of the first and second medium of the multimedia presentation based on the step of identifying content of the first medium**.

Applicants respectfully request the withdrawal of the rejection of claim 24, as amended. Additionally, claim 24, which depends from claim 24, is patentable over Zaboklicki for at least the same reasons as set forth above.

**g. Independent Claim 26**

Claim 26 is directed to a method of outputting a multimedia presentation at a receiver station. At least two media are received at the receiver station **from different sources**. Based on processing the two media, **content of a first and second of the at least two media is identified**. The multimedia presentation is **output based on the identification of content of both media**.

Zaboklicki fails to teach identifying **content of a first and second medium** based on the step of processing the media to output the presentation. As mentioned in the response to the rejection of claim 20, Zaboklicki fails to teach or suggest that the broadcast TV program is **identified for content**. Therefore, whether Zaboklicki's broadcast TV program (*arguendo*, the recited first media) is presented with supplemental audio or supplemental teletext graphics (*arguendo*, the recited second media), it is indisputable that both the first and the second media are not identified for content as a basis for providing the supplemented presentation.

Applicants request withdrawal of the rejection of claim 26 for at least the reasons discussed above. Additionally, those claims depending from claim 26 are patentable over Zaboklicki for at least the same reasons as for independent claim 26.

**(1) Dependent Claim 27**

Dependent claim 27, which depends from independent claim 26, further provides that the receiver station includes a “storage device . . . for . . . storing . . . [the] . . . two . . . media at [the] receiver station.” Zaboklicki does not disclose that both media, e.g., Zaboklicki’s conventional TV program and the supplemental audio/teletext video, would be stored as part of providing the presentation.

**(2) Dependent Claim 28**

Dependent claim 28, which depends from independent claim 27, (above), further provides the step of “originating a portion of [the] multimedia presentation at the receiver station based on [the] step of storing.” Because Zaboklicki fails to teach the storing of both media, as required by claim 27, it follows that dependent thereon claim 28 is patentable over Zaboklicki for at least the same reasons.

**h. Independent Claim 29**

Claim 29 is directed to a method of outputting a multimedia presentation at a receiver station. In this method, **a video image from a series of created discrete images is outputted into the multimedia presentation. A control signal is processed at the receiver station that programs a processor to create a series of discrete video images. Content of a first medium is identified, and based on this identification, an image of the series of images is output.** The outputted image and the medium are combined into the multimedia presentation.

Zaboklicki fails to teach or suggest applicants’ proposed claim recitation of **processing a control signal at a receiver station that programs a processor to create a series of discrete video images.** At best, Zaboklicki might teach that supplemental

teletext graphics might be selected based on user response so that they can then be output as conventional teletext characters. However, Zaboklicki does not even remotely suggest the feature of a control signal causing the creation of a series of discrete video images from which one will be selected for output, as per claim 29.

Additionally, if Zaboklicki were applied to claim 29 in the above fashion, the recited first medium would correspond to Zaboklicki's conventional TV program. As previously discussed, there is no suggestion in Zaboklicki of identifying the content of Zaboklicki's conventional TV program, nor for making such identification as a basis for selecting one of a series of discrete video images to be output therewith.

Applicants request that the rejection of claim 29 based on Zaboklicki be withdrawn. Claim 30, which depends from claim 29, is patentable over Zaboklicki for at least the same reasons as set forth above.

#### i. Independent Claim 33

Claim 33 is directed to a method of outputting a multimedia presentation at a receiver station. The multimedia presentation includes information from two signals. The receiver station is tuned to receive a second signal based on a **comparison of content identified from the first signal with data stored at the receiver station**. The **comparison is based on a user response** received based on output of the first signal. The multimedia presentation is output and includes information from the first signal and information from the second signal.

The FOA applied Zaboklicki's broadcast TV program to applicants' recited first signal and Zaboklicki's viewer response to the broadcast television programming to applicants' recited user response. However, as stated above in response to the rejection of claim 20, Zaboklicki fails to teach or suggest **identifying content of the first signal**, i.e., the broadcast television programming. By necessity, Zaboklicki fails to teach **comparing the identified content to data stored at the receiver station**. The only

storage device disclosed by Zaboklicki is the local information source 50 that records certain video signals. Zaboklicki fails to teach any comparison with such transmitted video signals.

Finally, Zaboklicki fails to teach **tuning the receiver station to receive a second signal based on the step of comparing**. Zaboklicki suggest that television channels can be switched if fragments are in different channels. (P.13, ll. 12-14). But there is no teaching or suggestion that this switching would be made **based on a comparison to dated stored at the receiver station with identified content of the broadcast television programming**.

Applicants request that the rejection of claim 33 be withdrawn. Additionally, those claims depending from claim 33 are patentable over Zaboklicki for at least the same reasons provided above for independent claim 33.

**12. Rejections based on Etkin, "Vertical Interval Signal Applications," in view of Stern, "An Automated Programming Control System for Cable TV."**

Paragraph 73 rejects claims 52 & 54-56 under 35 U.S.C. § 103(a) as being unpatentable over Etkin, "Vertical Interval Signal Applications," in view of Stern, "An Automated Programming Control System for Cable TV."

**a. Summary of Etkin, "Vertical Interval Signal Applications"**

Etkin discusses uses for the data transmitted in the vertical blanking interval (VBI) of television transmissions. Etkin gives a list of 10 applications using the VBI. The eighth application details unattended remote control of VTRs. It states in entirety, "Remotely located video tape recorders can be operated by the application of V.I. control for recording programming during otherwise [non-program broadcasting] periods. CATV (cable access television) systems being fed from regional microwave systems could record feature films and other program material at night, or other available time

periods, using the same microwave facilities that are used for daytime [carrying] of regular programs."

**b. Summary of Stern, "An Automated Programming Control System for Cable TV"**

Stern describes an automated programming control system for a cable TV headend designed by Stern for the Manhattan Cable TV. A micro-processor controls a micro-controller that performs video switching. The micro-controller also performs some machine control functions that may be based on sensing control track pulses to search for program material on a tape. The system controls the output of programming on the multiple channels provided by the cable system.

**c. Summary of Application of Ektin and Stern**

Ektin is provided by the FOA to demonstrate that automated recording at CATV headends were known in the art.

Stern is additionally provided to demonstrate an automated CATV headend. The system controls the output of locally originated programming and programming picked up off the air. The system includes means to create a program schedule, means for controlling the switching and machine control tasks to automatically output the scheduled programming, and a switching circuit that is controlled by the controlling means.

**d. Deficiencies in the Application of Ektin in view of Stern**

In paragraph 73 of the FOA, the Examiner appears to offer the combination of Ektin's remote control of VTRs using VBI signals with Stern's automated CATV headend to show the remote control of VTRs at a cable headend using remotely transmitted signals carried in the VBI. Without addressing the operational viability of the proposed combination, applicants would like to point out that the Examiner has provided

no motivation whatsoever to justify the proposed combination. As such, the Examiner has not provided a *prima facie* case of obviousness and the rejection should be withdrawn on that basis alone.

Even accepting the combination, Ektin in view of Stern fail to teach or suggest a transmitter station for enabling a receiver station to output a multimedia presentation. Both applied references deal with network headend transmitter stations that are capable of storing and sequentially arranging programming for subsequent transmission. Neither reference teaches or suggests the determination of any type of content of a received medium and therefore both references fails to coordinate outputting any transmission based on any determination of content. Neither reference teaches or suggests outputting a multimedia presentation at a receiver station.

e. **Independent claim 51**

Applicants propose to amend claim 51 to set forth a transmitter apparatus for enabling a receiver station to output a multimedia presentation. Generally, the apparatus of claim 51 corresponds to the method described in claim 43 of enabling a receiver station to output a multimedia presentation. The apparatus includes a receiver for receiving a first of a plurality of signals that cause a receiver station to **store a first medium, to determine content of a second medium, to coordinate presentation of a first portion of the multimedia presentation with a presentation of the second medium based on the determination, and to output the multimedia presentation based on the coordination.** A transmitter is connected to the receiver for transmitting the first of the plurality of signals.

As discussed above, the receivers of Etkin and Stern do not coordinate the presentation of any portion of multimedia programming based on determining the content of any received signal. Accordingly, the headend of Etkin and Stern do not enable the receiver stations to determine any content of the television signal. Etkin and Stern fail to

teach or suggest a receiver for receiving or a transmitter for transmitting a signal **adapted to cause a receiver station to determine content of a medium** as set forth in proposed claim 51.

Therefore, applicants respectfully request that the rejection of independent claim 51 based on Etkin and Stern be withdrawn. Additionally, those claims depending from claim 51 are patentable over this cited art for at least the same reasons as set forth for independent claim 51.

**(1) Dependent Claim 55**

Applicants propose to amend claim 55 to recite wherein said receiver station “processes a portion of [the] first medium based on a second identifier.” The first medium is processed based on an identifier, and the apparatus further comprising a selective transfer device operatively connected to said transmitter for communicating at least one of said first identifier and said second identifier to said transmitter. Neither Etkin or Stern teach or suggest applicants’ proposed claim limitation of processing a portion of a medium based on a second identifier.

**13. Rejections Based on Sherry and Green**

**a. Summary of Sherry**

Sherry is an article in the IEEE Transactions on Consumer Electronics, Vol. CE-25, No. 3. Sherry reports the result of field tests of the quality of reception of teletext over the ORACLE system. Sherry describes the ORACLE system as including Program Companies in London which are the source of the ORACLE data. The data is distributed over a network switching system operated by the British Post Office. National service is provided to regional broadcasting companies by the use of asynchronous data bridges installed in each region. These data bridges allow ORACLE data to be inserted on the transmitted signal when a Program Company is providing a local program by “bridging” the data from its incoming network feed. The data may also be inserted when the

regional program feeds the national network. Also described is the re-broadcasting and transposing of broadcasts to reach larger audiences.

**b. Summary of Green**

Green is a paper presented in the IBA Technical Review. Green describes the development and implementation of the ORACLE system. Green describes that the ITV network is formed of 15 regional services. National ORACLE programming is originated in London. The regional services receive and distribute this programming when they use network programming originating from the London companies. When programming is originated locally, a network feed from London is often available. A teletext data bridge takes the teletext signal from one video signal and re-times it to re-insert it into another, asynchronous, video signal. Software enables operators to edit the teletext carried over the system. Pages of teletext information are formed and stored for transmission by the editor. The stored pages may be scheduled for transmission either immediately or at any predetermined time. The system can be used for subtitling. Also, as well as providing teacher's notes to supplement normal educational programs, ORACLE pages have been used to provide information about individual lessons and to provide pupils with notes and diagrams during science experiments.

**c. Summary of the Application of Sherry and Green**

The Examiner relies on the Sherry and Green as cumulative references disclosing the teletext system operated by the Independent Broadcasting Authority in Britain. As such, applicants' understanding is that Sherry and Green are not asserted as a proper combination. However, if the Examiner offers Sherry and Green as a proper combination, applicants reserve the right to point out the lack of requisite motivation for the combination and the failure of any other requirements for combining references under § 103.

The Examiner acknowledges that no control signal which served as the basis for transmitting a signal of a multimedia presentation is explicitly disclosed by Sherry or Green. The Examiner asserts that the television transmission station includes control rooms from which control signals are transmitted to control transmitting multimedia signals.

**d. Independent Claim 57**

Paragraph 74 rejects claim 57 under 35 U.S.C. § 103(a) as being unpatentable over Sherry and Green. The teletext distribution system of Sherry and Green does not show or suggest each element of the invention defined by proposed claim 57. In particular, the applied art does not show or suggest a receiver station adapted to output a multimedia presentation based on **identifying content** of a first **and** content of a second medium.

Applicants propose to amend claim 57 to set forth a receiver station adapted to output a multimedia presentation based on identifying content of a first and content of a second medium. Applicants' claimed invention provides for outputting a multimedia presentation at a receiver station based on what content is in the received media. For example, based on the identity of a particular television program, certain identified graphic data could be overlaid on the television video. The teletext distribution system of Sherry and Green supply embedded teletext to receivers. Sherry and Green provide no suggestion to identify content of the television program at the receiver station Sherry and Green include no suggest to coordinate teletext and television at the receiver station based on the identity of the content of the television program. Accordingly, Sherry and Green fail to show or suggest identifying content of a first and content of a second medium as set forth in proposed claim 57.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 57 based on Sherry and Green be withdrawn.

Claims 58-60 depending from claim 57 are patentable in view of Sherry and Green for at least the reasons discussed above.

**14. Rejection based on Honbashi in view of Stern**

**a. Summary of Honbashi**

Honbashi describes a system for commercial insertion into television programming. The system takes commercials delivered on a mother tape having one copy of each commercial. The commercials are reproduced onto a series of video tape recorders (VTRs). The first commercial is recorded on the first VTR, the second on the next, and so forth. After all the VTRs are used, the next commercial is added to the first VTR and the process is repeated. The VTRs are played in sequence as the commercials are aired on the programming in accordance with the broadcast schedule. A controller automatically transfers the commercials from the mother tape to the series of VTRs based on the broadcast order.

**b. Summary of Stern**

Stern generally discloses an automated programming control system for cable television. The program control system provides for preparing an off-line daily program schedule, storage of the daily program schedule on magnetic disk, automatic selection of input devices or feeds for programming, and the development of various printed reports for record-keeping purposes.

**c. Summary of the Application of Honbashi in view of Stern**

In paragraph 80, the Examiner rejects claim 57 for the same reasons as set forth regarding claim 65 in paragraph 79 and regarding claim 61 in paragraph 77. In paragraph 77, the Examiner asserts that Honbashi discloses a commercial message broadcast system that included a plurality of VTRs that were controlled pursuant to instructions generated by a programmable controller. The commercial messages would be inserted into the

broadcast program based on the message schedule. In paragraph 79, the Examiner states that the addressing scheme for locating/retrieving the desired commercial messages (for example, by using cue tones on a control tape) that is not explicitly discussed in Honbashi would have been within the skill of the ordinary artisan as exemplified by Stern's automated programming control system.

**d. Deficiencies in the Application of Honbashi in view of Stern**

In making what appears to be a combination of Stern and Honbashi, the Examiner fails to establish how the teaching of Stern could be used to modify the teaching of Honbashi to arrive at the invention defined by claim 57. Specifically, the Examiner fails to identify what in Stern would be used to modify Honbashi and how. Moreover, the Examiner fails to provide a showing of the motivation to make such unspecified modifications to Honbashi based on Stern. Therefore, applicants submit that the Examiner has failed to establish a *prima facie* case for the combination that is proposed based on the applied art.

**e. Independent Claim 57**

Paragraph 80 reject claims 57 under 35 U.S.C. § 103(a) as being unpatentable over Honbashi in view of Stern. Applicants traverse the rejection of independent claim 57 on the grounds that the amendment to the claim moots the rejection.

Independent claim 57 is generally directed to method for a transmitter station in a network to enable a receiver station to output a multimedia presentation including a first medium and a second medium. Based on an instruction, the transmitter station makes a transmission that enables the receiver station to **process a first medium and a second medium to identify the content of the first medium and the second medium**, and to output a simultaneous or sequential presentation of information from the first medium

and the second medium based on identifying the content of the first medium and the second medium.

The applied art of Honbashi and Stern, alone or in combination, does not render amended claim 57 obvious under 35 USC. § 103(a) because the applied art fails to teach, suggest or imply the invention defined by amended claim 57.

In particular, Honbashi and Stern, alone or in combination, fail to teach providing a multimedia presentation whereby a multimedia presentation comprising information from two media is presented **based on identifying the content of the first medium and the content of the second medium.**

Collectively, Honbashi and Stern at best teach a commercial message insertion system that operates at a broadcast headend to assemble a transmission including broadcast programs and commercial messages to be transmitted to receiver stations.

Neither Honbashi nor Stern discloses the output of a multimedia presentation at a receiver station whatsoever. The output at a receiver station of the Honbashi/Stern system is a conventional TV presentation, not a multimedia presentation as per claim 57.

Moreover, Honbashi and Stern do not disclose or suggest the claimed feature of determining the content of a first medium and the content of a second medium in order to output such a multimedia presentation. Honbashi and Stern relate to commercial insertion at the headend of a television distribution system. There is no suggestion whatsoever in Honbashi nor Stern that a receiver station that receives the television programming is adapted to identify content of the television programming (first medium) and then to identify content of a second medium so that a multimedia presentation can be output. In short, both Honbashi and Stern are concerned with controlling the assembly of the transmission at the headend, not with identifying content and assembling multimedia presentations at receiver stations. Honbashi/Stern do not teach or suggest the claimed invention because said references are concerned with a completely different problem from that addressed by the present invention.

For at least the above reasons, applicants respectfully request that the rejection of claim 57 based on Honbashi/Stern be withdrawn. Claims 58-60 depending from claim 57 are patentable in view of Honbashi and Stern for at least the reasons discussed above.

### **15. Rejections based on Baker**

#### **a. Summary of Baker.**

Baker is European patent Application No. 0 152 251. Baker describes a multi-channel broadcasting system where encrypted data are transmitted between a central terminal and subscriber terminals. When a subscriber selects a secure channel, the subscriber terminal is temporarily connected to a separate channel for receiving encryption algorithm information (e.g., an algorithm and key). Baker at 4. The encryption algorithm information is stored and used to decrypt and encrypt data received and sent on the selected secure channel. Baker at 5. Baker mentions that the encryption algorithm information (algorithm and key) may be downloaded into a computer. Baker at 7. Baker describes an example that includes transmitting data upstream that represents a request for bank account information. Baker at 5. Downstream data from the headend includes a “picture signal appropriate to the bank” onto which the requested account data is superimposed. Baker at 5. Baker only contemplates data transmitted in teletext form for reception by a teletext receiver. Baker at 6-7.

#### **b. Deficiencies in the Application of Baker**

Baker is a European patent application published August 21, 1985. Each pending claim in this application is entitled to an effective filing date of November 3, 1981 for the reasons discussed above in Section III. Accordingly, Baker is not available as prior art against the pending claims. Applicants respectfully request these rejections over Baker be withdrawn for at least this reason. However assuming, *arguendo*, that the application of Baker is maintained, applicants submit the following reasons why Baker fails to show or suggest the claims, as amended.

The Examiner provides an overview of the teaching of Baker. However, the Examiner does not set forth the differences in the claim over Baker, the proposed modifications to Baker necessary to arrive at the claimed subject matter, nor an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make such modifications. The Examiner merely provides for some claims a single sentence relating features of Baker with elements of the claim. For the remainder of the rejected claims no analysis at all of the claim is provided. Because the Examiner has not specifically identified the necessary modifications to Baker, nor the motivation required to make them, the Examiner has failed to present a *prima facie* rejection under 35 U.S.C. § 103(a).

#### c. Independent Claim 2

Paragraph 83 rejects claims 2 under 35 U.S.C. § 103(a) as being unpatentable over Baker. Baker does not show or suggest each element of the invention defined by proposed claim 2. In particular, Baker does not teach a receiver that receives two media wherein the receiver stores a first medium and **determines content of a second medium**.

The Examiner appears to rely on the data and television signals of Baker to show a multimedia presentation. However, proposed claim 2 is amended to set forth that the receiver stores a first medium. Proposed claim 2 is also amended to set forth the step of determining content of a second medium. Baker discloses that based on a user request an appropriate television image is provided on a selected channel. Embedded in that television signal is data that is decrypted and superimposed on the television image. The receiver in Baker decrypts and displays all data embedded in the television signal without regard to the content of the television image or the content of the data. Baker does not suggest storing the television image. Moreover, in applicants' method, functions are based on determining the content of media that are broadcast. For example, in one embodiment described in the specification, the receiver determines that the "Wall Street

Week" program is received. Baker makes no such determination because the receiver is already tuned to the proper channel based on the user's request.

In sum, the applied art fails to teach the steps of storing a first medium and determining content of a second medium as set forth in proposed claim 2.

Additionally, proposed claim 2 is amended to set forth coordinating the multimedia presentation at the receiver station under computer control. Thus, applicants' invention provides for controlling the presentation of output data based on the television programming to be received. Baker merely decrypts and outputs data as it is received and displays television video as it is received. There is no suggestion that the receiver in Baker coordinates that output as set forth in claim 2.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 2 based on Baker be withdrawn. Claims 2-18 depending from claim 2 are patentable in view of Baker for at least the same reasons discussed above.

#### (1) Dependent Claim 7

Dependent claim 7 further provides that "the content of the second medium explains a significance of [the] content of [the] first portion of [the] multimedia presentation." In other words, the **content** of the second medium that is output in coordinated fashion with the first medium includes some explanation or evaluation of the meaning or importance of the content of the first medium. This additional feature is not taught or suggested by Baker. Baker merely discloses a television signal of a picture appropriate to the bank from which the data is provided. There is no suggestion in Baker that this television picture explains the significance of the displayed data. Accordingly, Baker does not teach or suggest the additional feature recited by dependent claim 7.

**(2) Dependent Claim 8**

Dependent claim 8, which now depends from claim 7, further provides that the “content of [the] second medium explains [the] significance in audio.” One example provided in both the 1981 and 1987 specifications is where the Wall Street Week “talking head” verbally explains (audio of the second medium) to the audience member how the audience member’s portfolio performed in comparison to the overall market as the audience member’s graphic (first medium) is presented. As discussed above, Baker discloses a picture signal appropriate to the bank. Baker includes no suggestion that this signal includes any audio that explains the significance of the displayed data. Accordingly, Baker does not disclose or suggest the invention of dependent claim 8.

**(3) Dependent Claim 17**

Dependent claim 17 further provides for “storing [the] second medium at [the] receiver station.” In other words, the invention provides for storing not only the first medium, but also the second medium. Baker includes no suggestion to store the television programming. The claimed approach for storing both the first and second medium in order to facilitate the coordinated presentation is not even contemplated by Baker.

**(4) Dependent Claim 18**

Dependent claim 18, which depends from claim 17, further provides that the “second medium is stored based on [the] step of determining.” In other words, the second medium is stored based on determining the appropriate content of the second medium that is to be coordinated with the stored first medium. This beneficial feature would allow, for example, only the correct or appropriate second medium out of a plurality of received second media to be selected and stored before it is presented in coordinated fashion with the first medium. Baker does not suggest storing the television picture and

does not suggest identifying the television picture. Baker, thus, does not suggest storing the second medium based on determining its content as recited by claim 18.

**d. Independent Claim 20**

Paragraph 83 rejects claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The output of decrypted data of Baker does not show or suggest each element of the invention defined by proposed claim 20. In particular, the applied art does not show or suggest **identifying content of a first medium** based on an **identifier** and controlling the receiver station to respond to a **processor instruction** based on the identification. Also, the applied art lacks any suggestion of **responding to the processor instruction to coordinate presentation of the first and second media based on determining content of the second medium**.

Applicants propose to amend claim 20 to set forth identifying content of a first medium of a multimedia presentation and responding to a processor instruction to coordinate presentation of the first and second media of the presentation. According to this invention, for example, a particular television program may be identified with an identifier received at the receiver. Based on the identity of the particular television program, a processor instruction then causes additional matter, such as a graphic overlay, to be output with the television program to form a multimedia presentation. Baker merely shows outputting decrypted data with television video. There is no suggestion of any identifier used to identify the television programming. Accordingly, the applied reference fails to show or suggest identifying content of a first medium based on an identifier as set forth in proposed claim 20.

Additionally, proposed claim 20 is amended to set forth that controlling the receiver station to respond to the processor instruction is based on identifying content of the second medium. For example, in applicants' claimed invention, the graphic overlay could be coordinated with the television program based on identification of its content.

Accordingly, the content of both media are identified. As discussed above, the television receivers of the applied art do not identify the content of the television program. Thus, the applied art does not suggest receiver function that is based on identifying both media of a multimedia presentation.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 20 based on Baker be withdrawn. Claims 21-23 depending from claim 20 are patentable in view of the applied reference for the reasons discussed above.

#### (1) Dependent Claim 22

Claim 21 depends upon independent claim 20. Applicants propose to amend claim 22 to set forth that that the step of controlling of claim 20 includes “originating [the] second medium.” According to the claimed invention, for example, the overlay outputted with the television program is originated based on identifying the television programming. For example, a graphic of the viewer’s stock performance is created at the receiver based on identifying the “Wall Street Week” program. The displayed data (such as bank account information) in Baker originates at the bank; it is not originated at the receiver station. The advantage of the Baker system is the ability to access remote data. Accordingly, the displayed data is not originated at the receiver. Baker does not suggest the limitations added by claim 22.

#### e. Independent Claim 24.

Paragraph 85 rejects claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 24. In particular, the applied art does not show or suggest **identifying content of a first medium based on a control signal and coordinating presentation** of a multimedia presentation based on the identification.

Applicants propose to amend claim 24 to set forth identifying content of a first medium of a multimedia presentation based on a control signal. For instance, a control signal may refer to user input prompted to be input during a television program. The identity of this prompted input can then provide the basis for adding supplemental material to the television program. Baker, to the contrary, simply outputs whatever data is transmitted with the television programming. Baker includes no suggestion to identify the content of the data or the television video. Accordingly, the Baker fails to show or suggest identifying content of a first medium based on a control signal as set forth in proposed claim 24.

Proposed claim 24 is amended to include the step of coordinating presentation, based on the step of identifying, the first medium with the second medium. Thus, the invention provides for additional material to be coordinated with a television program based on identifying content in the television program. As discussed above, Baker suggests no such coordination at the receiver station. The Baker system merely outputs television programming and data as they are received at the receiver station with no coordination. Baker, thus, fails to suggest coordinating presentation as set forth in claim 24.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 24 based on Baker be withdrawn. Claim 25, which is dependent from claim 24, is patentable over Baker for at least the same reasons.

#### f. Independent Claim 26

Paragraph 85 rejects claim 26 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 26. In particular, the applied art does not show or suggest **identifying content of a first and**

content of a second medium and outputting the multimedia presentation based on the step of identifying.

Applicants propose to amend claim 26 to set forth identifying content of a first and content of a second medium. As discussed above, applicants' claimed invention provides for outputting a multimedia presentation at a receiver station based on what content is in the received media. Also as discussed above, Baker simply outputs whatever data is transmitted with the television programming. Baker includes no suggestion to identify content of the television program. Accordingly, Baker fails to show or suggest identifying content of a first and content of a second medium as set forth in proposed claim 26.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 26 based on Baker be withdrawn. Claim 27 and 28 depend from claim 26 and are patentable in view of Baker for the above reasons.

**(1) Dependent Claim 27**

Dependent claim 27 further provides that the receiver station has a storage device and that the method includes the step of "storing . . . [the] two . . . media at [the] receiver station." Claim 27, thus, provides that both media are stored at the receiver station. Baker, however, includes no suggestion to store the television programming. Accordingly, Baker fails to suggest the additional limitations set forth by dependent claim 27.

**(2) Dependent Claim 28**

Claim 28, which depends from claim 27, further provides for "originating a portion of [the] multimedia presentation at [the] receiver station." For example, in the Wall Street Week example supporting claim 28, the portion may correspond to the personalized overlays that are originated, or generated locally, by the receiver station. In other words, dependent claim 28 further provides a portion of the multimedia

presentation is locally originated. Baker does not disclose or suggest this additional feature. Baker provides for accessing data at a remote source (such as bank account data). Accordingly, the origination of data at the receiver is contrary to the teaching of Baker. Baker does not suggest originating a portion of the multimedia presentation at the receiver station.

**g. Independent Claim 29**

Paragraph 81 rejects claim 29 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 29. In particular, the applied art does not teach a method of outputting a multimedia presentation including processing **a control signal** that programs a processor to **create a series of discrete video images, identifying content of a first medium**, and causing an image of the series to be output based on the identification, wherein the multimedia presentation includes the first medium and the output video image.

The method of claim 29 outputs a multimedia presentation including a video image from a series of video images with another media. This method provides, for example, for a series of overlays to be created that relate to a television program at a receiver station. The receiver station is then controlled to output a selected overlay with the television video as a multimedia presentation tailored to the specific receiver station. The applied art shows encrypted data embedded in a television signal. There is no suggestion that this embedded data includes a control signal that programs a processor to create a series of discrete video images as set forth in proposed claim 29. The data output cannot be considered to be a series of discrete video images as set forth in claim 29, because the data are not outputted as discrete images that are displayed based on identifying content of the television video with which they are displayed. In fact, Baker discloses no identification of the television programming. Accordingly, the applied art

does not teach causing a video image of the created series to be output based on identifying content of a first medium as set forth in claim 29.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 29 over Baker be withdrawn for at least the above reasons. Claim 30 depending from claim 29 is patentable in view of the applied references for the reasons discussed above.

#### **h. Independent Claim 37**

Paragraph 85 rejects claim 37 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 37. In particular, Baker does not teach a receiver including a processor that coordinates a multimedia presentation based on **determining content of a second medium**.

Proposed claim 37 is amended to set forth that a processor coordinates a presentation based on determining the content of a second medium. As discussed above with respect to claim 2, Baker does not coordinate the presentation of the data and video component of a television program based on determining the content of the television programming. In fact, Baker does not determine the content of the television programming at all. Accordingly, the applied art does not teach a processor that coordinates based on determining content of a second medium.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of independent claim 37 based on Baker be withdrawn. Claims 38-42 depending from claim 37 are patentable in view of Baker for the reasons discussed above.

#### **(1) Dependent Claim 41**

Proposed claim 41 sets forth a storage device for “storing [the] second medium.” As claim 37 sets forth a device for storing the first medium, both media are stored by the

claimed apparatus of claim 41. The Baker receiver does not store the television programming. Accordingly, this reference includes no suggestion of a second device for storing a second medium in the applied references.

i. **Independent Claim 43**

Paragraph 85 rejects claim 43 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 37. In particular, Baker does not show or suggest an information transmission that is adapted to cause a receiver station to **determine content of a medium, and to coordinate a** multimedia presentation based on determining the content.

Proposed claim 43 is amended to set forth receiving and transmitting an information transmission that is adapted to cause the receiver station to determine content of the second medium and to coordinate presentation of the first portion of the multimedia presentation with the presentation of the second medium based on that determination. The transmission of Baker includes encrypted data embedded in a television signal. Baker does not show that this information transmission is adapted to cause the receiver station to determine content of the television signal and coordinate presentation of the data with the television video as set forth in proposed claim 43. Accordingly, Baker can not suggest receiving or transmitting such an information transmission as required by proposed claim 43.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 43 over Baker be withdrawn for at least the above reasons. Claim 44-49 depend from claim 43 and are patentable in view of Baker for the above reasons.

(1) **Dependent Claim 46**

In conjunction with intervening dependent claims 44-45, dependent claim 46 further provides that a first identifier is used for determining the content of the second

medium and a second identifier is used for determining the content of the first medium. Therefore, claim 46 provides that the content of both media are determined in order to present the coordinated presentation. As discussed above, Baker does not provide for determining the content of the television programming with which the encrypted data is transmitted. Therefore, Baker does not satisfy dependent claim 46.

**j. Independent Claim 51**

Paragraph 85 rejects claim 51 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 51. In particular, Baker does not teach a signal that causes a receiver station to **determine content of a medium**.

Proposed claim 51 is amended to set forth that the receiver receives and the transmitter transmits a signal that is adapted to cause the receiver station processor to coordinate a presentation based on determining the content of a second medium. As discussed above with respect to claim 2, the receiver of Baker does not coordinate the presentation of the encrypted data and television video based on determining the content of the television signal. Accordingly, the headend of Baker does not enable the receiver stations to determine any content of the television signal. Baker does not teach a receiver for receiving or a transmitter for transmitting a signal adapted to cause a receiver station to determine content of a medium as set forth in proposed claim 51.

For at least the above reasons, applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of independent claim 51 based on Baker be withdrawn. Claims 52-56 depending from claim 51 are patentable in view of Baker for the reasons discussed above.

**(1) Dependent Claim 55**

Proposed claim 51 is amended to set forth that the receiver processes a portion of the first medium based on a second identifier. As discussed above, with respect to claim 51, Baker does not determine the content of the television program as there are no disclosed identifiers for the television programming. Accordingly, there is no suggestion to process any portion of a medium based on a second identifier as set forth in claim 55.

**k. Independent Claim 57.**

Paragraph 85 rejects claim 57 under 35 U.S.C. § 103(a) as being unpatentable over Baker. The system embedding encrypted data in television signals of Baker does not show or suggest each element of the invention defined by proposed claim 57. In particular, the applied art does not show or suggest a receiver station adapted to output a multimedia presentation based on **identifying content of a first and content of a second medium**.

Applicants propose to amend claim 57 to set forth a receiver station adapted to output a multimedia presentation based on identifying content of a first and content of a second medium. As discussed above, applicants' claimed invention provides for outputting a multimedia presentation at a receiver station based on what content is in the received media. Also, as discussed above, Baker simply outputs whatever data is transmitted with the television programming. Baker includes no suggestion to identify content of the television program. Accordingly, Baker fails to show or suggest identifying content of a first and content of a second medium as set forth in proposed claim 57.

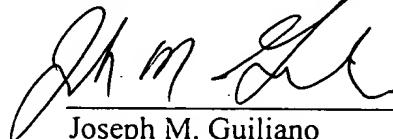
For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 57 based on Baker be withdrawn. Claims 58-60 depending from claim 57 are patentable over Baker for at least the reasons discussed above.

## VI. CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Reconsideration and allowance of the instant application are respectfully requested.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



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Date: February 4, 2002  
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